2004

A qualitative exploration of students' experiences with tutorial learning

Angela Alexander
Louisiana State University and Agricultural and Mechanical College, angela.alexander@nicholls.edu

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_dissertations

Part of the Education Commons

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_dissertations/3397

This Dissertation is brought to you for free and open access by the Graduate School at LSU Digital Commons. It has been accepted for inclusion in LSU Doctoral Dissertations by an authorized graduate school editor of LSU Digital Commons. For more information, please contact gradetd@lsu.edu.
A QUALITATIVE EXPLORATION OF STUDENTS’ EXPERIENCES WITH TUTORIAL LEARNING

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College
in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Educational Leadership, Research, & Counseling

by
Angela Alexander
B.A., Spelman College, 1978
M.Ed., Northeast Louisiana University, 1980
August, 2004
ACKNOWLEDGMENTS

As I reflect on this journey I must first acknowledge my faith, which has been my strength and my shield. As I moved along this path, there have been many people who prayed for me and believed in me and in my ability to finish the race. I thank each and every one who has helped me reach my goal.

Dissertation Committee

To my major professor, Dr. Becky Ropers-Huilman, I express my appreciation for your guidance, hours of assistance, sound advice, and dedication. You are truly a master teacher who willingly gives of your time to ensure that true learning and a quality document will result from this endeavor. Thank you.

To the professors who served on my doctoral committee, Dr. Marietta Del Favero, Dr. Kennedy, Dr. Weltman, and Dr. Durant, I express my eternal gratitude for your genuine concern, inspiration, and input. I have gained valuable lessons from each of you. I especially want to thank you, Dr. Durant, for opening your door to give me support during the early days of my journey when I was truly at a crossroad.

Participants

I thank each participant for sharing with me and trusting me. I learned more than what I am able to put on the pages of this document. The shared experiences will always be remembered and treasured.

Colleagues and Friends

Many of you have served as role models, even though you may not know it. I appreciate the undying support, time, and tolerance that you afforded me from day one until the end. Dr. James Njengere proved to be a loyal and knowledgeable friend. Dr.
Wanda Jackson-Shelton, my lifelong friend and confidant, thank you for the many calls to make me keep pushing. Thank you, Mrs. Betty Elfert, for providing professional opportunities and making time for me even when time was of the essence. Dr. Tiffany Lombas-Lopez, you gave much of your time and energy. You shared professional information and know-how and it is appreciated.

Sincere thanks are given to my family in Junior Division, Jacinta Ruffin, Suzan Bailey, Dr. Josephine Allen Oubre, Felicia Harry and family, Irene Gordon, Cynthia Daigle, and Diana Croom. A long time friend and confidant, Ms. Germaine Domino, re-entered my life as though an angel sent from God. You gave of your time, energy, and most of all, skill to see me through to the end. I thank you. Ms. Melonee Wicker, you are a gem. Thanks. I know that I am truly blessed because of each of you.

My Family

Last, but by no means least, I thank my family. My daughter, Regina Ashley, for being my constant companion, my copy girl at the library, and for being my inspiration, I want to thank you for going along with the program. My enduring appreciation and love goes to my parents, my dad, Dr. William Alexander and my mom, Mrs. Eva Dorothy Smith Alexander, who are the absolute best. I thank you for always being there, for making this possible via positive expectations, patience, finances, and love. I also thank you Walter Craig, my brother, who gives unselfishly and who has always supported me and given me encouragement. I also thank my grandmother, Mrs. Edna Alexander, who I am so fortunate to have. I will always appreciate the love, understanding, and faith exhibited by my family members. You have all been the torch that guided me along the way.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................................................................................... ii

LIST OF TABLES ................................................................................................................... vii

ABSTRACT ............................................................................................................................... viii

CHAPTER

1 INTRODUCTION ................................................................................................................. 1
   Background and Existing Research ............................................................................. 3
   Definition of Terms and Concepts ............................................................................. 4
   Tutoring Services and the Myers-Briggs Type Indicator ........................................... 6
   Statement of the Problem ......................................................................................... 8
   Purpose of the Study ............................................................................................... 9
   Research Questions ............................................................................................ 10
   Significance of the Study ...................................................................................... 10
   Scope and Limitations ......................................................................................... 11
   Description of Dissertation Chapters ................................................................. 11

2 REVIEW OF THE LITERATURE .................................................................................... 14
   Procedures for the Literature Review ................................................................ 14
   Tutorial Learning ................................................................................................... 15
   The Tutoring Process ............................................................................................ 16
   Tutorial Services in Higher Education ................................................................ 17
      Background ....................................................................................................... 18
      Peer Tutoring in Higher Education .................................................................. 18
   Recipients of Tutorial Services in Higher Education .......................................... 20
      Under Prepared and Developmental College Students ................................... 21
      Non-Developmental College Students ............................................................ 22
      College Students in High Risk College Courses ............................................. 24
      Personality ......................................................................................................... 25
   Myers-Briggs Type Indicator (MBTI) ..................................................................... 26
   Personality Preferences ....................................................................................... 27
      Personality and Learning Styles ...................................................................... 29
   Student Learning Styles Using the MBTI ............................................................. 31
   Summary ................................................................................................................ 32

3 RESEARCH DESIGN METHODOLOGY .................................................................... 33
   Purpose of the Study ............................................................................................. 33
   Research Questions ............................................................................................. 34
   Qualitative Methods ............................................................................................ 34
   The Role of the Researcher .................................................................................. 35
   Unique Contribution ............................................................................................ 36
   Overview of Methodology: Interpretivism ........................................................... 39
Research Plan ........................................................................................................... 40
Population .............................................................................................................. 41
Sampling Procedures .............................................................................................. 41
Sample .................................................................................................................... 42
Data Collection ....................................................................................................... 42
  Participant Selection ............................................................................................ 43
  Establishing Contact ............................................................................................ 44
  In-Depth Individual Interviews ............................................................................ 44
  Participant Profiles .............................................................................................. 45
Portraiture ................................................................................................................ 45
Data Analysis Procedures ....................................................................................... 47
  Data Reduction .................................................................................................... 47
  Data Display ........................................................................................................ 48
  Conclusion Drawing and Verification ................................................................. 48
Trustworthiness of Results ....................................................................................... 49
  Creditability ......................................................................................................... 49
  Document Analysis ............................................................................................. 50
  Transferability ...................................................................................................... 50
  Reflexive Journal ................................................................................................ 51
  Dependability ...................................................................................................... 51
  Peer Debriefer ..................................................................................................... 51
  Confirmability ...................................................................................................... 52
Summary .................................................................................................................. 52

4 DATA ANALYSIS AND RESULTS ........................................................................ 53
Student Participant Profiles ..................................................................................... 54
Group Characteristics ............................................................................................... 102
Thematic Analysis ................................................................................................... 104
  Choice to Attend Tutoring ................................................................................... 104
  Relationship with Tutor ....................................................................................... 107
  Learning Strategies ............................................................................................... 110
  Derived Benefits of Tutoring .............................................................................. 112
Discussion of Themes: Categories .......................................................................... 114
Discussion of Themes: Patterns .............................................................................. 116
Data Analysis by MBTI Type ................................................................................... 119
Perceptions of Tutorial Learning by Type ............................................................... 121
  ISTJ ..................................................................................................................... 121
  ISFJ ..................................................................................................................... 124
  INTJ ..................................................................................................................... 126
  ISTP ..................................................................................................................... 127
  ISFP ..................................................................................................................... 130
  INTP ..................................................................................................................... 131
  ESTP ..................................................................................................................... 133
  ESFP ..................................................................................................................... 134
  ENFP ..................................................................................................................... 135
  ESTJ ..................................................................................................................... 136
LIST OF TABLES

1. Group Characteristics and Participant Type .................................................103
2. Participant Characteristics .............................................................................119
3. Type by Percentages ..................................................................................120
4. Participants Group by Type ........................................................................121
ABSTRACT

The purpose of this study is to explore how students perceive their tutorial learning experiences at the collegiate level in a campus-based center and to explore the personality preferences of the students who participate in tutoring, according to the Myers-Briggs Type Indicator (MBTI). The study is designed to address tutoring from the perspective of the tutee’s experiences and to allow them to tell their story of how tutoring impacted their academic experience. The following research questions guide this study:

1. What are students’ perceptions of their tutorial learning experiences?
2. Are students’ perceptions of their tutorial learning experiences related to personality type preferences?

Data analysis in qualitative research has a two-fold purpose to understand the participants’ perspective and to answer the research questions. This study uses the three-phase procedure described by Miles and Huberman (1994) to give meaning to the data and for organizational purposes. The three-phase procedure includes data reduction, data display, and conclusion drawing and verification.

Thirty-two students voluntarily participated in in-depth interviews. Interview data are transcribed and subsequently analyzed to facilitate the development of themes. Document analysis, a reflexive journal, and in-depth interviews are utilized to construct participant profiles and to generate themes. Themes that emerged are as follows: (1) Choice to Attend Tutoring, (2) Relationship with Tutor, (3) Learning Strategies, and (4) Derived Benefits of Tutoring. The themes are analyzed and the results discussed. Thereafter, the analysis turns to the personality type preferences in accord with the
The type preferences are coded and the results of the type preferences discussed in relation to the perceived experiences of participants as well as their styles of learning. A discussion of the findings, along with recommendations for practice and research conclude the study.

Suggestions might be made to implement changes in tutorial learning as a form of academic support. While other learning styles inventories are available, the MBTI is an assessment that identifies individual strengths for students to work from giving it an advantage when compared to others. Finally, it is also important to assess the needs of each segment of the student population.
The great paradox of today’s higher education system is that with almost limitless access to a college education, there are individuals who do not enlist the resources available to them to attempt the pursuit of this opportunity. While universities offer a variety of services to assist students who choose to attend, many factors contribute to the degree of success of a college student. On an individual level, factors include, but are not limited to, personal characteristics, such as motivation, ability, and personality type. On an institutional level, availability of academic support resources for students in need, such as tutorial learning, may contribute to success. College level tutorial learning takes on various forms. The present study sought to address the perceptions of college level students who voluntarily chose to receive peer tutoring in a campus-based tutoring center.

The process of peer tutoring can be defined as one in which a person who is proficient in a subject matter comes to the aid of one who is less proficient (Gartner & Riessman, 1993; House & Wholt, 1990; Topping, 1996). Historically, the practice of tutorials was deemed a necessary and essential component of a student’s learning and education process (Zartisky, 1989). However, this practice has received less emphasis in recent years. The decreased emphasis on tutoring has been likely caused by raising standards at the secondary school level. Therefore, it is believed that students are now better prepared than in the past for the rigors of college (Kellogg Commission Conference, 1998). In an ever-changing, fast-paced technological world, there is still a need for tutoring as a type of academic support service (Civikly-Powell, 1999; Theall,
The transition from the level of expectation in high school to that of college level work often requires that a student make use of available student services. The services provided for students allow them to adjust and perform to the best of their abilities (McGrath & Townsend, 1997). More often than not, it is the responsibility of the individual student to recognize his or her needs and seek help from the most appropriate resource(s).

Universities are often perceived as non-intrusive institutions. That is, courses, programs, services, and opportunities are made available, and responsibility for taking advantage of these resources lies with the student (Carter, Bishop, & Kravits, 2000). Recently, more emphasis has been placed on the student, his or her personal needs, and how these needs can be met by more student-oriented and user-friendly university services (Carter, Bishop, & Kravits, 2000; Smith, 2001; Taylor, 1982). One such service is that of tutorial learning.

Gartner and Riessman (1993) found that tutoring addressed more than just the goal of attaining a correct response. Students who participate in tutoring encounter a variety of strategies that can be utilized in learning. Additionally, the tutoring process reinforces learning. Most importantly, a link between cognitive learning and social development is formed. The connection formed is the bringing together of academic and social skill development which is salient to an individual’s level of achievement. A college-educated person is thought to be a well-rounded individual who has developed intellectual and social skills. The development of such skills, which are begun early in life, are dependent upon a variety of factors, one being personality characteristics.
Personality preferences lead to different ways of communicating and learning (Barron, 1997; Peeke, Steward, & Ruddock, 1998; Schroeder, 1993). The personality preferences of college students are important non-cognitive factors that can contribute to students’ success and help to determine whether or not tutoring services will be utilized advantageously.

**Background and Existing Research**

University-based services for college students have been part of a longstanding tradition in higher education. It is critical to address the purpose, role, and needs related to such services in light of an increasingly diverse student population (Gardner, Jewler, & Cuseo, 2000; Weinsheimer, 1998). Gardner, et.al (2000) provided evidence that student access and enrollment in higher education institutions of learning has increased in enrollment in recent years. These authors found that at least fifty percent of high school graduates are likely to attend college, yet about forty percent of the students who enter a bachelor’s degree program are non-completers. The doors of opportunity to a college degree are now open to students of different backgrounds. Not all students are ready for the academic challenge, however.

The dramatic changes in the college student population have resulted in the search for appropriate academic support systems in institutions (Heckman, 1993; McGrath, 2001). The university support provided to students varies from services related to residential living to personal and academic counseling and various types of tutorial support, sometimes in the form of remedial or developmental classes.

A student’s need for such programs is typically assessed based on students’ standardized test scores (Gose, 1998). Other factors such as high school grade point
average, rank, and special talents are considered, but there is no question that standardized test scores are weighed heavily relative to other factors in college admissions (Kellogg Commission, 1998). The reliance on the utility of standardized scores derives in part from the predictive abilities of such tests. It is assumed that scoring above certain levels ensures academic achievement. Yet, research suggests that all students who enter college are susceptible to failure without having the motivation or study behaviors needed for college level success (Bender, 2001).

In an effort to assist students entering the university, support services, particularly, academic support services are significant (Baron, 1997; Gardner, Jewler, & Cuseo, 2000), but typically the focus of tutorial support services has been on mandatory programs for select students or cohorts (McGrath & Townsend, 1997). These students have most often been determined by lacking certain requisite standards at the college level or, as stated earlier, required college entrance scores. Yet, there are also students who independently recognize a need for additional help and seek the required support.

There is a need for this area of research to have its boundaries extended by exploring why some students voluntarily seek support while others do not. So that students might best be served, it is necessary to learn more about students’ experiences in tutoring. This study involves an investigation of students who have chosen to receive such available services.

**Definition of Terms and Concepts**

This section includes a discussion of the key concepts to be used in this study. These concepts serve to provide a context for the current research project and are defined according to their application to this study.
**Peer Tutoring/Tutorial Learning** – These terms will be used interchangeably. For the purpose of this study, peer tutoring is defined as a campus service that is provided for students who request additional academic assistance. Peer tutoring can be used as a vehicle for reflection about the cultural and structural significance of the central discipline being studied or, indeed, about the nature and purpose of education itself (Goodlad & Hirst, 1989). Other terms that will be used in this study are Academic Support Services or Student Support Services.

**Peer Tutor/Tutor** – A person who gives additional instruction to another for the purpose of clarification or increased comprehension, and competence in a specified subject area. In this study, the additional instruction is limited to that which is conducted on the college campus.

**Tutee** – One who receives the aid of another; usually a student who is in need of assistance in order to become more competent in a specified subject matter.

**Myers-Briggs Type Indicator (MBTI)** – A psychological assessment tool for indicating personality styles and preferences. Commonly called the MBTI, the instrument has as its foundation the understanding and appreciation of human differences (CAPT, 2002). A secondary term used in this study is Personality Preferences.

**The Tutorial Learning Center** - Provides peer tutoring to students enrolled in developmental and freshman level (non-developmental) English, Mathematics, Chemistry, Physics, Computer Science, and Foreign Languages. Supplemental Instruction (SI) is provided in Human Anatomy Lab and History. The Tutorial Learning Center strives to help students become independent learners and improve their retention rate (Tutorial Handbook, 2002).
Developmental Course – A course designed to enable students to develop the skills required to do college-level work.

Learning Styles – The different ways people think and feel as they solve problems, create products, and interact. Learning styles models tend to concern themselves with the process of learning: how individuals absorb information, think about information, and evaluate the results (Montgomery, Moody, & Sherfield, 2001; Silver, Strong, & Perini, 1997).

Tutoring Services and the Myers-Briggs Type Indicator

One way to determine the benefits of tutorial services is to evaluate the academic performance of students. This is most often conducted by checking the final grades received in tutored courses against initial academic reports or in-coming measures. The academic reports may be self-reported need or official assessment scores, such as low ACT scores or departmental test scores. *There are a multitude of strategies related to learning and many inventories that assess learning strategies. One objective of tutorial learning is to assist students in developing the necessary skills or strategies for learning that can improve their academic performance.

Educators need to gain more information in the field regarding the process of learning. Learning how to learn emerged as a new field of research that began in the 1960’s and has steadily grown in interest (Hirsch, 1994; Jensen, 1987; Sims, 1995; Vin, 1992). The number of inventories, a minimum of 32, that are available to assess learning is also rising. The instruments vary in structure and complexity (Carter, Bishop, & Kravits, 2000; Jensen, 1987; Sims, 1995). Among the many inventories, the following two are particularly well known instruments. The Dunn and Dunn Learning Style Model
(1993) is an instrument that has been refined since the 1970’s. The authors are well noted for their study of learning preferences in which they identify five basic stimuli that help to determine a student’s ability to focus on the process of learning as they interact with the learning environment and conditions (Given, 1997). Another inventory, the Pathways to Learning, gained notability from its author’s theory of multiple intelligences (Carter, Bishop, & Kravits, 2000; Gardner, 1993) identifies eight characteristics of intelligence and specific skills that are used in studying as a method to reinforce each. No inventory can be declared as superior over another, however (Jensen, 1987).

A large majority of inventories, as well as noted authors on the subject of study skills, address three basic areas of focus in student learning, which relate to whether a student is considered to be a visual, an auditory, or a kinesthetic learner. As each name implies, the visual learner learns best from information that is presented in a visual form, not necessarily in the form of notes, but information that is provided with a visual impact such as diagrams, maps, or some form of coding. Auditory learners learn best from processing the spoken word and reciting information received on their own or explaining what they have learned to others. The kinesthetic learner is tactile. These learners need to participate in their learning. They learn best through experience and application of information (Carter, Bishop, & Kravits, 2000). Learning that centers on the particular aspects of skill development as a way to improve academic performance generally relate to learning strategies. On the other hand, learning styles refer to the processing of information. The style of learning is a reflection of personal characteristics and can be a salient factor in the discovery of one’s self as well (Carter, et.al., 2000).
The research presented in this study includes the presentation of personality theory according to the Myers-Briggs Type Indicator (MBTI) assessment. The MBTI is a formal assessment that can provide a wide variety of information to illustrate the needs, wants, patterns, and expectations of individuals. The MBTI is an instrument that allows a researcher to explore the ways in which type preferences influence an individual’s characteristics as well as some aspects of students’ patterns of behavior and responses to various settings and activities (Anchors, 1987; Provost, 1987).

It is for these reasons that the MBTI is utilized extensively at the university in this study. Additionally, this instrument is presently utilized at the university as a measure to assist students with knowledge of their preferences when exploring career options and learning styles that might help them better utilize their natural strengths and build others based on knowledge of weaknesses. The MBTI will be used here to explore how personality type might be used to better serve tutored students.

**Statement of the Problem**

Student support services have taken on new meaning within the higher education community. Students with varied backgrounds, abilities, and needs have prompted higher education professionals to challenge traditional methods of assisting college students in their educational pursuits (Border, 1999; Milem, 1998; Rollins, 1990). New forms of student support services are being created or reconsidered in an attempt to help students succeed in college. One form of support, tutorial learning, can have a significant impact on the achievement of students. Because support services have become a major aspect of student satisfaction and success at universities (McGrath, 2001), it is incumbent upon researchers to explore students’ experiences in tutoring at the college level.
Much research has focused on the outcomes of mandatory tutorial support (Weinsheimer, 1998; Morris, 1994). However, research on tutorial services has not fully examined the characteristics of students who voluntarily seek tutoring and their reasons for doing so. It is anticipated that this study will add to the literature on tutorial services by analyzing students’ perspectives qualitatively. Much of the prior research on tutorial learning has been conducted with students who are in mandatory study or federally funded student services programs. Usually these programs focus strictly on boosting the academic achievement of low-level students without regard to the individual characteristics of a student. Additionally, the primary focus of research in this area has been quantitative.

This qualitative study investigated the experiences of those students who received college-level tutorial services. Furthermore, this study served as an investigation of how personality type preferences played a role in students’ perceived experiences of tutorial services. The results may be useful to provide optimal tutoring services based on students’ needs.

**Purpose of the Study**

This study (1) investigated the experiences of students engaged in tutorial learning, (2) explored the characteristics of college students receiving tutorial assistance according to the personality type as indicated by the Myers-Briggs Type Indicator (MBTI) and, (3) investigated in what ways, if any, do students’ interpretations of their tutorial experiences vary based on the MBTI. The study sought to extend the literature on non-cognitive perspectives, particularly personality preferences, by considering the tutees’ experiences of tutorial learning. For example, personality type may be a factor in
both the behavior of students who seek tutorial assistance and in the way students evaluate their experiences in the context of tutorial services. To be truly supportive, these services must be evaluated not simply in terms of grades (outcomes), but in terms of the quality of experiences among those receiving services (process). In order to investigate how students’ perceptions of their tutorial learning relate to personality type, I relied on the research questions that are stated explicitly in the following section.

**Research Questions**

The following research questions were investigated and guided this study:

1. What are students’ perceptions of their tutorial learning experience?
2. Are students’ perceptions of their tutorial learning experiences related to personality type preferences?

**Significance of the Study**

There is limited research on the tutees’ perceptions of tutoring at the college level, nor is there much research on the role of personality preferences in relationship to tutorial learning. The current study explored the experiences of students who voluntarily seek tutorial support in an effort to expand the understanding of tutoring as a form of support that can enhance the academic efforts of all students. Personality types were also explored to offer greater insight into how personality preferences relate to student perceptions of tutorial support and its role in the promotion of learning among college students.

The conclusions of the study may result in a more comprehensive understanding of what students want and need, and how to better serve them through tutorial support. These findings may also be utilized to explore institutional practices that encourage
excellence in academics for all students. Additionally, the results of the study may urge college-level policy makers to consider how students’ personality characteristics relate to their tutorial experiences when developing or implementing plans concerning tutorial support services.

**Scope and Limitations**

This study focused on how personality preferences relate to the perceptions of students who have experienced tutorial learning services. The Myers-Briggs Type Indicator (MBTI) was utilized to explore the concept of personality preference type. The evaluation of services was given from the perspectives of only those students who completed a semester of voluntary tutoring for a given university course. Only those students who completed both the course and tutoring at the campus tutorial learning center were eligible for inclusion in this study. This research project was concentrated at a regional university in southeastern Louisiana with an approximate enrollment of 7000 students. Extraneous factors that may have affected student perceptions but were not measured include communication styles of those involved with aiding the participants of this study, the levels of experience held by tutors as well as teachers, and the performance of students taking the tutored course for the first time as compared to those who may be course repeaters.

**Description of Dissertation Chapters**

This dissertation was organized into five chapters. Chapter one, the Introduction, provided an overview of the components of the proposed study. This included the development of context by providing background information and a summary of the state of existing research on the topic of interest. The purpose of the study, the explicit
statement of the problem addressed, and the significance of the results were outlined. The research questions were addressed as well as the significance of the study.

Chapter Two, the Literature Review, was organized into three broad categories which included an analysis of published information relevant to (a) tutorial learning, (b) recipients of tutoring services, and (c) personality preferences according to the Myers-Briggs Type Indicator (MBTI). Collectively, this information aided in providing the necessary context from which this study was conceptualized. A review of relevant literature in each of these broad categories was critically analyzed to permit inclusion of only that information which directly related to the proposed study.

Chapter Three, Research Design and Methodology, depicted in detail those methods and procedures that comprise the research protocol utilized for the study. Detailed statements presenting the research questions addressed in the study were offered, followed by a comprehensive research plan. This research plan introduced the overall research design protocol. Attention was given to the role of the researcher, my unique contribution to the topic of interest and the study, and ideas generated by a pilot study. Then, an in-depth explanation of the research plan was provided. A detailed protocol addressing sampling procedures, participant selection, data collection and analysis procedures, as well as issues related to the reliability, validity, and trustworthiness of findings were specified.

Chapter Four was dedicated to presenting qualitative data analysis and results. Analysis of the data collected was described having used the interview protocol as the method of inquiry in gaining the solicitation of verbal data. The findings of the collected data were transcribed in an effort to learn about participants’ perceptions and experiences
as they related to the topic of interest. Particular attention was given to a discussion of
the findings in an effort to establish the trustworthiness of conclusions.

Chapter Five, the final chapter included in this dissertation, was dedicated to
discussion and conclusions as they pertained to the results of the research. A summary of
the purpose of the study, procedures and methods, results and conclusions, and the
significance of the study were offered. Attention was given to addressing the
implications of this research for relevant audiences, as well as providing suggestions for
future research on the topic of interest in this study.
CHAPTER 2

REVIEW OF THE LITERATURE

This chapter reviews relevant literature as it related to the proposed research study. Related areas of research were explored to provide a background and present the array of research that pertains to the proposed study. I have included a section to describe the procedures that were followed in conducting and organizing the literature review contained in this chapter. The review begins with an overview of the tutoring process, followed by a discussion of students who receive tutorial services. Additionally, information about personality is explored. Topics included in this exploration are a discussion of the Myers-Briggs Type Indicator (MBTI) and its explanation of personality preferences. The chapter summary serves to provide a synopsis of the literature that gives context for the study.

Procedures for the Literature Review

The literature review began with a search of terms related to my topic. Using the combined terms: (a) tutoring, (b) personality, and (c) college students, resulted in a total of eleven articles. The various databases used in my search included the Education Index, the Educational Resources Information Center (ERIC), the Psychological Abstracts Index, and Dissertation Abstracts. In addition to utilizing the individual databases, these terms were used in a combined search using WebSPIRS. I also used the terms independently and in various combinations. The combination of terms above resulted in only one article using the Dissertation Abstracts in an independent search. When searching for the MBTI and tutoring, only two articles were produced from the ERIC database. As a result of finding only two articles, I combined the terms MBTI and
learning. This resulted in fifty-four entries from the ERIC database. I will present the relevant literature from that review in three primary sections: (a) tutorial learning, (b) recipients of tutoring services in higher education, and (c) personality as it relates to the context of the study with emphasis on use of the MBTI.

**Tutorial Learning**

Tutoring can be as natural as the giving and receiving of information from one individual to another; it can also be as formal as an entire organization dedicated to providing a means of support and improvement (Gose, 1998). Tutoring is not new to education (Billings, Shroyer, & Wells, 2000). Instead, it is one of the oldest teaching methods and a widely accepted campus service (Zaritsky, 1989). Tutorial learning takes many forms as an approach to learning and increased comprehension.

Studies investigating the effects of tutoring on college students have shown that tutoring has generated positive results (House & Wohlt, 1990). Butler (1991) expounded on the benefits of tutoring from the perspective of learning by stating that students frequently think they have good study habits, but this is rarely the case. This is why tutors should be dedicated to helping develop the skills, abilities, attitudes, and behaviors necessary for true learning. Research conducted by Norton and Crowley (1995) indicated that students in tutoring develop more sophisticated ideas about how to approach learning and the development of their learning, but no significant differences resulted in overall academic achievement. Relevant factors to consider in the study of tutorial learning programs are included in the present literature review. A discussion of the tutorial learning process follows.
The Tutoring Process

Tutoring serves as a support and an alternative approach to increasing the effectiveness of the traditional lecture styles of teaching and learning. The traditional format of learning requires that students take a passive role in their own learning process (Gardner & Jewler, 1996). The tutoring process gives the student a chance to interact with the material and concepts to be learned (Libertin, 1991; Topping, 1996). At the core of the tutorial learning process is student engagement. In the tutoring process, an essential aspect is to explore the concept of critical thinking or the approach used in learning, not just receiving a correct response. The fact that tutoring is usually conducted in small-group settings also addresses the issue of quality learning (Daniel, 1988; Saurino, 1996). The determinants of quality learning can be increased time and effort spent in study, and higher grades received in tutored courses. While most studies of the tutoring process regard the academic outcomes as the salient factor, some have been found to speak directly to the process of tutoring itself.

Davis (1987) provides one study that speaks directly to the college-level tutoring process. He considers the peer tutoring process to revolve around three axes: (a) tutoring approach; (b) tutoring style; and (c) tutoring relationship. Davis contends that the approach used by a tutor should be grounded in theory. Accordingly, the tutor interacts from either the person-centered, process-centered, and/or rule-governed approach. The second axis moves to the styles of tutoring. Davis stated that this is the attitudinal continuum, a perspective based on pedagogical style, logic, and/or instinct. Tutoring relationship, the third axis, describes the relationship that occurs in the tutoring process. This process is considered to be the continuum of interaction, which is based on
conversational modes. The modes of conversation are identified as being conversant (collaborative), receiver (student-centered), and/or authoritarian. Davis suggested that based on these three dimensions, a researcher can use the model to designate roles, differentiate between concepts, and provide training for tutors. At the core of this study is the idea that personality preferences, particularly those of the tutee, play a vital role in the tutoring process. It is likely that an awareness of personality preferences can aid in assessing the delivery of tutorial services to all students in addition to assessing the process or approach used in servicing students who choose to participate in tutoring.

It is further proposed by Thompson (1994) that personality type theory is an avenue to be explored in tutoring. Additionally, Thompson stated that the behaviors tutors exhibit when tutoring might well relate to their individual personality preferences. Thompson concluded that the tutoring process could be enhanced if tutors were more aware of type theory in general and their own personality type in particular. This information could be of valuable aid in understanding that different strategies may be necessary to reach different students in the tutorial process.

**Tutorial Services in Higher Education**

The literature in this section describes tutorial services in higher education. Provided is a brief background, followed by a discussion of the recipients of tutoring at the college level. Tutorial services are provided for both developmental and non-developmental students. One form of tutoring, supplemental instruction, commonly called “SI”, is also included in this discussion. Supplemental Instruction is specifically designed to include all students, regardless of their level of college preparation.
Background

From the advent of higher education, students were entrusted to tutors who were responsible for their intellectual, moral, and spiritual development (Zaritsky, 1989). The concept of peer tutoring began with Andrew Bell in the late Eighteenth and Nineteenth Centuries and was later improved upon by Joseph Lancaster (Goodlad & Hirst, 1989). While agreeing that the peer tutoring process is an effective intervention in academic and social development, Gartner and Riessman (1993) noted that the degree of effectiveness might be dependent on factors such as age, achievement level of both tutor and tutee, and the ability level of the tutor.

In the 1960s, when United States colleges and universities began to admit large numbers of low income and educationally disadvantaged students, tutorial services were among the first programs on a large scale to help these students (Maxwell, 1985). Yet, research results of tutoring programs in higher education have been mixed (Hock, Deshler & Schumaker, 1999; House & Wohlt, 1990; Landurm & Chastian, 1998). Indeed, many studies also indicated the benefits for the tutor outweighed that of the tutee (Annis, 1983; Gartner & Riessman, 1993; Topping, 1996).

Peer Tutoring in Higher Education

Peer tutoring, as addressed by Goodlad and Hirst (1989), can be used as a vehicle for reflection about the cultural and structural significance of the central discipline being studied or about the nature and purpose of education itself. It is often stated that learning is a life-long process, and Libertin (1999) added that tutoring is the same as “dialoging” - listening to yourself and reflecting on what has been said. The idea of personality preferences as an influential factor in tutoring emphasizes this belief. There are students
who prefer talking as a form of communicating and others who prefer listening. Peer tutoring allows for both preference characteristics to be used to communicate and learn information. Collaboration, rather than competition, is an essential component of peer tutoring. Pierce, Stahlbrand, and Armstrong (1984) stated that the focus in a collaborative learning environment places emphasis on the process as well as the outcome. Tutorial learning goes beyond better academic performance by having people interact, thus enhancing interpersonal skills and effective communication.

The goal of tutoring, particularly at the college level, is to engage students in the process of learning (Billings, Shroyer, & Wells, 2000). Students of today “view knowledge and derive meaning in vastly different ways” (Schroeder, 1993), from in the past. In acknowledgement of this viewpoint, recent years have seen more focus placed on improving the quality of undergraduate teaching and learning. There has also been a call for a paradigm shift from the traditional format of the teaching process being on the teacher to a focus on the learning process and the learner (Angelo, 1997; Barr & Tagg, 1995). According to Gardner, Jewler, and Cuseo (1998), when students actually become involved with their academic studies, students expend more mental energy and this significantly enhances the learning process. The focus on the learning process and the learner brings renewed interest to tutorial learning in higher education. Despite the new learner-oriented shift, college level instruction still generally involves more self-directed learning. The availability of tutoring gives students an avenue for collaboration that may not be provided in all classes.

Variations in the approach or tutoring style exist even in the peer-tutoring model. The peer-tutoring scheme that is primarily designed to give assistance to a student’s
academic adjustment is the co-tutoring scheme. The intent is for each participant to have an opportunity to participate in learning as a tutor as well as a tutee. Cross-age tutoring, among the various forms of tutoring, is most closely related to methods used in teaching. In reference to higher education, the process of cross-age tutoring allows for upper-class undergraduates to tutor lower-level undergraduates, usually in small group settings (Topping, 1996). Regardless of the type of peer tutoring process, one shared characteristic is that peers help each other learn and, at any given time, each may take the role of tutor as well as tutee (Putnam, 1997; Topping, 1996). The peer-tutoring model takes advantage of the stronger student being allowed to act as the role model student. Ultimately, the peer-tutoring model allows for students to challenge themselves such that they do not only understand, but can also help other students understand as well. This next section of the literature review discusses the recipients of tutorial services at the college level.

**Recipients of Tutorial Services in Higher Education**

Tutorial learning in higher education is most often focused on freshman level students (Higbee & Dwinell, 1988). Research has indicated that the first year in college is crucial to college success (Gardner & Jewler, 2000). First-year experience experts generally agree that the success of freshmen is dependent upon a relationship between the student and the college campus environment (Terry, 1990). This relationship is built upon a foundation of both academic and social interactions. Vincent Tinto’s theory of persistence suggests that academic and social integration impact the satisfaction and retention of college students, particularly in the first year. Consequently, the first year must be a delicate balance of support and challenge (Upcraft, Gardner, &
Associates, 1989). Because the goal in a tutorial learning setting is academic
development and social integration, and communication between people is required to
fulfill the goal, tutorial services are uniquely able to allow for this type of integration to
take place. The tutoring process can be an essential aid to the institution’s enhancement
of both the intellectual and social skills of a student, particularly in the first year.

Certainly, while particular students can be identified as “at-risk” because of
standardized test scores, low grade point averages, and minority status for example, it
would be remiss not to note that all freshmen are in a new environment that may cause
stress to even the most “prepared” student. Upcraft (1984) suggested that just as there is
academic underpreparedness, academic overpreparedness could result in academic
boredom. Ultimately, this lack of challenge can lead to attrition, just as in cases of under
preparedness. There is a transitional or adjustment period for all students, even the most
prepared. Students often find themselves in need of academic support to compensate for
the added rigor of college study (Gardner, Jewler, & McCarthy, 1996). Tutorial services
and/or other avenues of collaborative learning seem to serve as appropriate avenues for
both categories of students.

**Under Prepared and Developmental College Students**

Students who are considered to be “at-risk” are often from an environment that
has been detrimental to a student’s overall development (Goodlad & Hirst, 1994).
Research has found that less parental guidance and praise, less consistency of appropriate
behavior (both social and academic), and lack of encouragement to perform well
negatively influence a student’s academic achievement (Davis, 1975; Hirsch, 1994;
Singham, 2003). As a result, academic unpreparedness begins to take shape early in a
student’s academic career. Robinson (1996) described three categories of under prepared students as: (a) academically under prepared, (b) emotionally under prepared, and (c) culturally under prepared. Students who are academically under prepared can be easily identified through the typical use of assessment scores or high school transcripts. It is believed that the needs of these students can be easily addressed with preparation courses, usually identified as remedial or developmental courses, study skills workshops, or tutoring. The emotionally under prepared tend to be those students who may have difficulties outside of the school setting, such as problems at home, alcohol or substance abuse, or for some, simply a lack of self confidence. The culturally under prepared are typically first generation college students who have no background knowledge about a college campus environment and how to be successful (Robinson, 1996). It is quite clear that each category of student has a disadvantage that can hinder academic progress.

Necessary for the development of all students are assessment and appropriate interventions. An empirical study conducted by Hodges and White (2001) suggested that high-risk students be encouraged to participate in tutorial learning. Particularly, studies have reported that participation in tutoring during the freshman year plays an important role in student development (Bender, 2001; House & Wohlt, 1990). Most obvious is the need to assist the student with study skills and academic tutoring, the significance of which goes beyond just passing a course. At the heart of such assistance is the academic and personal integration of the student into the college environment.

Non-Developmental College Students

Annis (1983) conducted a study of tutorial services in higher education with sophomore level female college students in a classroom setting. A History course was
used to model the tutoring process. It was found that those who prepared and then tutored another student did significantly better than those who simply prepared. The course instructor later utilized Bloom’s Taxonomy to determine various aspects of tutoring and being tutored on content-specific and generalized cognitive gains. Bloom’s Taxonomy is a classification system that identifies levels of thinking behaviors exhibited in learning. The Taxonomy assumes that learning ability can be measured along a continuum from simple to complex that includes three domains: cognitive, psychomotor, and affective (Bloom.html, 2002). The analysis resulted in significantly greater gains in the content-specific and cognitive scores. These findings indicated that a 3-step verbal mode of learning was involved that included paying attention to the material to be learned, encoding it in a personally meaningful way, and associating it with prior knowledge. The focus of the aforementioned study, while investigating a “regular” college level sophomore class, was conducted in an effort to seek performance outcomes as a result of tutoring. Few studies have focused on non-developmental students who received tutorial learning at the collegiate level; however, some studies have been conducted as related to the learning styles and/or personality characteristics of non-developmental college students.

Mills (1983) reported that some patterns existed in personality type preferences of gifted adolescents who were enrolled in a college program. These students were administered the Myers-Briggs Type Indicator (MBTI). Overall, diversity in personality type was reported; however, the gifted students in the program under study were predominantly found to have the sensing as opposed to the intuitive preference on this particular bipolar scale. The learning characteristic associated with the sensing
preference is action-oriented as opposed to a preference for thinking with the intuitive preference. The study points to what might be considered as a slight contradiction in past MBTI research, which indicated that students with a preference for sensing may have a more difficult time with learning, particularly at the college level (Schroeder, 1993). Yet, caution is advised in that this was a study of gifted adolescents who were in a college program.

**College Students in High-Risk College Courses**

For years, learning through tutoring has progressed from the idea of being an approach to learning for “at-risk” students to being an approach to learning for all students. This has been especially true when considering that educators now identify particular courses to be “high-risk” (Arendale, 1998). The Supplemental Instruction (SI) program, initiated by Deanna C. Martin (1974), originated at the University of Missouri in Kansas City. It began with medical students in courses such as Anatomy and Physiology. However, the program now spans the curriculum and is recognized internationally (SI, 2002). The SI program targets traditionally difficult academic courses; these are course subjects that routinely have thirty-percent or more “D” or “F” grades and withdrawals. The program provides regularly scheduled, out-of-class, peer facilitated sessions. Supplemental Instruction (SI) is open to all students enrolled in the identified high-risk course and attendance is voluntary. Supplemental Instruction is not viewed as remedial. The sessions are composed of students of varying abilities, and no effort is made to segregate students based on ability level. The key people in the program are students who are presented as “model students of the subject.”
It has been shown that universities that have the SI model in place have a significantly higher retention rate in addition to increasing the academic performance of students (Maxwell, 2001). The SI program maintains several key components that differentiate it from group tutoring. One of those key elements is that all students, regardless of ability, are encouraged to participate and process the material together rather than looking solely to an authority figure (SI, 1996).

**Personality**

While it is beyond the scope of the proposed research to engage in a comprehensive review of personality theory, a brief background is fitting as it relates to the use of the Myers-Briggs Type Indicator (MBTI) assessment that will be utilized in the current study. Personality preferences, according to the Myers-Briggs Type Indicator, developed from the field of personality theory (DiCaprio, 1974). Psychological Type theory derived from Jung (1923) who used “types” to describe personality traits. Jung proposed that people behaved differently because of individual preferences or functions. He based his theory on psychological health rather than dysfunction (DiCaprio, 1974; Guild & Garger, 1985; Kroger & Thuesen, 1992). Jung’s work has been used as one of the foundations for the growing field of personality theory and was paramount for the development of the MBTI.

The proposed study intends to investigate whether or not there is a connection between personality preferences and a student’s engagement with tutorial learning on a college campus. This section of the literature review concentrates on the meaning of the Myers-Briggs Type Indicator (MBTI) and personality preferences and personality in relation to learning style.
Myers-Briggs Type Indicator (MBTI)

Two researchers, Katherine Cooks Briggs and Isabel Briggs Myers, a mother-daughter team, developed the Myers-Briggs Type Indicator. They felt that the differences in people were of value and that the differences could be measured (Barbuto, 1997; Brownfield, 1993). The instrument was tested and developed over a twenty-year period. At present, with more than 50 years of research and refinement, it has become one of the most used instruments for the identification and study of personality (Montgomery, Moody, & Sherfield, 2001).

The Myers-Briggs Type Indicator (MBTI) purports to measure personality disposition and interests. The MBTI is based on Carl Jung’s theory of psychological type with emphasis on an individual’s ability to develop all processes on the scale (Guild & Garger, 1985). Primarily developed as a personality assessment, the MBTI has strong implications for the diversity of learners and various styles of learning (Jensen, 1987; Lawrence, 1979). As an overall objective, the MBTI presents a practical method of increasing the awareness and use of an individual’s strengths (Lawrence, 1979).

The assessment is used in personal, vocational, and marital counseling, executive development programs, educational settings, and personality research. It has been noted as being the most widely used personality assessment in the world (Harvard Business Review, 1997). In an effort to research the personality characteristics of tutorial learning students, it seems appropriate to use the MBTI. The instrument does not assume to be a measure of learning nor of learning style. It can, however, assess the behaviors, environments, and instructional tools that hinder or encourage learning for a particular student (Brownfield, 1993; Provost, 1987). While the MBTI is an indicator of
preferences, one of the assumptions of the instrument is that each of the personality characteristics can be developed because individuals have the ability to cultivate all preference categories of the instrument (Gardner, Jewler, & McCarthy, 1996).

The purpose of this study is to explore how students’ perceptions of their tutorial learning experience relate to personality type. The MBTI is an aid to the discovery process by determining how preference characteristics may relate to the perceptions of tutorial learning students. A discussion of type preferences, as they are identified in the bipolar categories of the MBTI follows.

**Personality Preferences**

There are four distinct categories or bipolar scales that indicate personal strengths or preference types, in opposition to less dominant characteristics in the personality (Myers & Myers, 1980; Patton, 1990). The four categories identified and interpreted are: (A) Extraversion/Introversion, (B) Sensing/Intuition, (C) Thinking/Feeling, and (D) Judging/Perceiving. The instrument identifies preferences, in type reports, by using the first letter of each preference with the exception of intuition, which uses the (N) as opposed to the I that is used for Introversion. Sixteen different types are produced as a result of the dominant preferences from each of the four bi-polar scales (Lawrence, 1979).

According to the first bipolar category, the extravert relates more easily to people and things, while the introvert relates more easily to ideas and concepts in the mind. Sensing/Intuition and Thinking/Feeling, identify the preferences given to taking in information and making judgments upon information. The sensing type is reported as being observant and preferring details. The intuitive type is prone to discover
possibilities, likes theory, and is creative. The thinking type makes decisions based on facts, and the feeling type makes decisions with personal involvement, based on concern for others. The last bipolar scale, judging or perceiving, determines an individual’s basic lifestyle orientation. Those with a preference for judgment typically desire organization, tend to be systematic, and prefer to regulate their environments. The person who has the dominant characteristic of perception tends to be flexible, spontaneous, and open to change (Gardner & Jewler, 2001; Guild & Garger, 1985; Kroger & Thuesen, 1992; Myers & Myers, 1980).

A standard type table is used to identify each of the sixteen types. The table can be viewed as an indication of type with the dominant characteristic of sensing on the left half of the table and type using the dominant characteristic of intuition on the right half of the table. In accord with type theory, there are four functions (S,N, T, F) and four attitudes (E, I, J, P). Everyone uses all characteristics, but have preferences in each of the four bi-polar scales (McCaulley, 1976). “Types are not static but dynamic” (Lawrence, 1979, pg.5). Extensive research has been conducted using the MBTI. Evidence exists that type preferences are not evenly distributed in the general population or in college populations (Lawrence, et al., 1979).

It is estimated that approximately 70% of the population uses extraversion (accordingly spelled by the author) and sensing compared to 30% use of each paired preference. The only scale that distinguished gender preferences is the thinking and feeling scale, which research has shown to identify more males, 60% with the thinking preference and females at 40%. The feeling characteristic is shown to be just the opposite with it being the dominant characteristic for females, 60% and only 40% of the
male population using feeling as the dominant trait. The judging and perceiving scale
have indicated a 50-50% split in this category (Lawrence, 1979).

Traditionally, it is thought that students at the college level should be prepared to
handle theory and concepts that often must be worked with independently. The learning
process is theory based with value placed on learning for its own sake. This method is
often difficult for sensing individuals and MBTI research has indicated that college level
work might be an uphill battle for these students (Jensen, 1987; Lawrence, 1979;
Schroeder, 1993). However, with a greater number of students realizing the opportunity
to attain a college degree, the diversity of today’s student population is becoming more of
a reflection of the general population, bringing a greater number of sensing oriented
students (Schroeder, 1993). As this new student population grows, higher education
professionals, particularly those in academic support services, must be concerned about
the transfer of knowledge and how the sensing student can best be served.

**Personality and Learning Styles**

There are many variables to explore in attempting to understand how an
individual best learns. For this study, among the variables of interest are personality
types and learning styles. Knowledge of these factors plays a part in the processing of
information and can assist in exploring individual strengths and weaknesses related to
learning (Montgomery, Moody, & Sherfield, 2001).

Learning theory and the application of learning styles has been studied
extensively during the last decade (Dunn, 1997; Dunn & Dunn, 1993; Swanson, 1995).
Academic achievement, a focal point in education, continually brings educators and
researchers to consider new methods in the teaching-learning process. Authors of first-
year experience research generally agree that the success of freshmen is dependent upon a relationship between the student and the college campus environment (Terry, 1990). According to Gardner, Jewler, and Cuseo (1998), when students actually become involved with their academic studies, the student expends more mental energy and this significantly enhances the learning process. The learning process has much to do with a student’s knowledge of study skills and learning style.

Much research centers on the concept of learning style. However, there is also related research that distinguishes between learning styles and learning strategies. Briefly, the two viewpoints differ with regard to an approach to learning. The learning strategies theory states that people can maximize their study and learning strengths and improve their personal weaknesses by being taught the proper techniques of study, which may also depend on their motivation for learning (Moody, 1993). The theory of learning styles relates more to the psychological aspect of learning. Researchers who advocate this approach to understanding learning argue that individual characteristics play a major role in how an individual perceives, makes sense of, and processes information (Moody, 1993). Leading researchers in learning styles theory, Dunn and Dunn (1993), defined learning style as “the way an individual processes new and difficult academic information or skills” (p. 4). Research conducted on learning styles gives consideration to a variety of factors in addition to achievement levels. Some factors include culture, age, methods of processing information, and the approach given to learning (Dunn, 1997-98; Griggs & Dunn, 1997-98). The way people think and feel as they encounter information is the emphasis in learning styles theory (Montgomery, Moody, & Sherfield, 2001).
The work of Katherine Briggs and Isabel Myers is utilized extensively in research relating learning to personality (Brownfield, 1993; Moody, 1993; Montgomery, Moody, & Sherfield, 2001; Peeke, Steward, & Ruddock, 1998; Rollins, 1990; Wilson, 1998). A brief overview of their assessment instrument, the Myers-Briggs Type Indicator (MBTI), is included in the following section.

**Student Learning Styles Using the MBTI**

Using the Myers-Briggs Type Indicator (MBTI), Robertson (1997), conducted a study of learning style differences between students enrolled in a developmental study skills class and The Learning Center tutors. The majority of the enrolled developmental study skills class students, mostly freshmen, had been placed in the class upon self-reported information. Several categories of students made up the composition of the class, twenty-one years or older (considered as non-traditional students in the study), academic probation students, and students who received low entrance test scores. The Learning Center tutors were composed of students with a minimum 3.000 on a 4.000 grading scale and predominately classified as juniors and seniors. The null-hypothesis stated that no significant personality preference differences between the two groups of students would be found. The results of the study found the null hypothesis to be accepted on three of the four bipolar scales, but rejected for the judging-perceiving scale. Keeping in mind that this was one of only two studies found to address the MBTI and tutoring, the issue of tutee personality type preferences and the receiving of tutorial learning services will add to the literature on learning in the higher education environment and, specifically, to college level tutoring.
Summary

This chapter presented the literature reviewed for the study. A summary of information pertaining to personality according to the MBTI was preceded by a review of literature regarding tutorial learning as well as the recipients of tutoring services. Each of these topics was addressed in accordance with the realm of higher education. Based on the limited available research on the topic of tutoring and personality in higher education, the study sought to contribute knowledge in this area.
CHAPTER 3
RESEARCH DESIGN METHODOLOGY

This chapter includes a detailed description of the research methodology that was utilized in the study. The chapter is organized into several sections that provide a framework within which to describe the research plan. A statement on the purpose of the study is provided, followed by the particular research questions that guided data collection and analysis procedures. Particular attention is given to the role of the researcher before a comprehensive research plan is outlined. The chapter ends with a summary to illustrate the linkages among the main sections presented as part of the research design methodology for this study.

**Purpose of the Study**

The purpose of this study was twofold. First, I explored the experiences of students who have participated in tutorial learning services on a college campus. Then, I explored the ways in which students’ interpretations of their tutorial experiences vary based on personality type preferences. Participants’ results from the Myers-Briggs Type Indicator (MBTI) were utilized to determine personality preference. Records regarding voluntary participation in tutorial learning services on a college campus were utilized to identify tutoring recipients, and personal interviews were conducted to learn about participants’ experiences in tutoring. In striving to achieve the purpose of this study, specific research questions were formulated and are detailed in the following section.
Research Questions

The research questions to be investigated in this study were:

1. What are students’ perceptions of their tutorial learning experiences?

2. Are students’ perceptions of their tutorial learning experiences related to personality type preferences?

The question that facilitated the exploration of the naturalistic aspect of my study was:

What are students’ experiences in the process of tutoring at the Tutorial Learning Center?

I integrated all available information yielded from each interview to provide a holistic result of my inquiry: In what ways do students’ interpretations of their tutorial experiences vary based on personality type preferences? The next main section addressed research design and methodology and provided a detailed description of the methods utilized to address these questions.

Qualitative Methods

Qualitative research has been defined in a variety of ways. In one definition, Strauss and Corbin (1998) identified qualitative research as:

Any type of research that produces findings not arrived at by statistical procedures or other means of quantification. It [qualitative research] can refer to research about persons’ lives, lived experiences, behaviors, emotions, and feelings as well as about organizational functioning, social movements, and cultural phenomena (p.10-11).

These authors elaborated that qualitative research is best used when the methods are: (a) complementary to the preferences and personal experiences of the researcher, (b) congruent with the nature of the research problem, and (c) employed to explore areas about which little is known. Miles and Huberman (1994) expressed an expanded position and indicated that qualitative research is conducted to: (a) confirm previous research on a
topic, (b) provide more in-depth detail about something that is already known, (c) gain a new perspective or a new way of viewing something, and (d) expand the scope of an existing study. Based on this collection of reasons, qualitative methods were appropriate for this study. The best-suited approach to this particular case came from the phenomenological perspective. According to McMillan and Schumacher (1997), phenomenology is the exploration of an individual’s experience with a particular phenomenon. Tutorial learning is an established practice that continues to serve as an important aspect of the educational process. Yet, there is still a need to explore tutorial learning from a holistic perspective in addition to an experimental perspective. This study will explore the perceptions of tutorial learning students to gain an understanding of a “naturally occurring phenomena,” students in tutoring, “in their naturally occurring states.” (Patton, 1990).

The following sections consist of an outline for the qualitative study. It begins with the role of the researcher, followed by descriptions of sampling procedures, data collection and analysis procedures, and procedures to establish the trustworthiness of results.

**The Role of the Researcher**

As a researcher, particularly one who utilizes a qualitative methodology, my role was very complex. Beginning with the identification of a meaningful topic, formulating an appropriate research question, and developing a comprehensive research plan were difficult and challenging tasks. I am also, as a researcher, responsible for reducing any personal biases that I might have. For example, I did not want to influence participants in such a way as to force responses that I believed a given person should have, knowing that
person’s personality type. I had the responsibility of promoting objectivity in my study. In an effort to clarify my preferences and ideas, I included a discussion of my personal beliefs as they are related to the overall topic of interest. The following subsection includes a presentation of my unique contribution.

**Unique Contribution**

Ultimately, this research was inspired by my interest and work in the educational field. More specifically, having spent many years as an assistant director of the college-campus Tutorial Learning Services, I had a particular interest in this aspect of learning. On another level, I feel that my unique contribution stems from three areas: (a) personal background, (b) educational background, and (c) my own personality type.

As an African-American female, I feel strongly about the role education plays in my life and I certainly believe that education allows for a sense of empowerment. However, I know that students face a variety of challenges during the educational process, particularly minority students, and the sense of empowerment can easily be overpowered by the levels of frustration. Tutorial learning can be one of the salient factors in achieving the background information or level of comprehension needed to reduce the frustration and strive toward the goal of achievement.

I am fortunate enough to have grown up within a family unit that always promoted education. The value of being a college graduate was a top priority; this was not just hoped for, it was expected. Both of my parents received a college degree and beyond and, ultimately, both became educators themselves. As a result, I was fortunate enough to have assistance at home if I found my studies to become difficult. Although help was readily available, even then it was sometimes challenging to admit the need for
help. However, I remember the joy I felt in learning the required information. As the years progressed and I entered my own college experience, once again I can remember specific instances of reluctantly requesting assistance, but being abundantly thankful after doing so. Now, as an educator, I encourage students to seek help when needed, whether it is for academic or personal support. A salient factor in my present position, however, is that I can only encourage. I often question, once a student decides to seek the assistance of a tutor, how does that person perceive the experience? Is the experience one that impacts the individual in a particular manner and, if so, how? I believe that tutoring, like teaching, can have an impact on the academic experiences of a student.

I feel that I have developed a rather structured style of classroom management; yet, I also feel that my approach is student-centered. Due to the level of my students, college freshmen, and due to the nature of my subject, personal and career development, I have to place emphasis on the student and incorporate an active learning approach. In teaching life skills, I believe that students must feel comfortable enough to discuss issues and get feedback. The main focus of my teaching philosophy is that education is a continuous learning process that can be enjoyable and stimulating, even though there is a need for structure and discipline. I provide classroom structure and discipline by planning class related activities and advising students as they progress through assignments, whether in-class group work or work done independently.

I perceive tutoring to be an environment that allows a student to enjoy learning while in an atmosphere of structure and discipline. As I think back on my personal learning experiences, I also believe that personality traits play a part in why a person has particular likes and dislikes in a learning situation. As mentioned previously, I indicated
a reluctance to ask for help, but found satisfaction in having done so. I believe that my personality preferences of introversion, intuition, and thinking are reflected in my perceptions of learning. I tend to want to accomplish (learning) tasks on my own, in my own way, and in my own time. I feel confident in my own ability to learn. The preference that is most unclear in my type, according to the MBTI, is the last scale of judging and perceiving. This scale basically determines how one likes to spend time in their environment: people with judging preferences tend to be structured and organized, while perceiving preferences like to be flexible and tend to be open to change. I tend to use both preferences with ease, but I believe that I am more prone to be flexible, which can create what others see as a tendency to procrastinate. However, in thinking back from my high school days until recent times, I have always had the tenacity to rise to both the challenge of learning and completion of a learning task when needed.

The assumptions I hold for the findings of this study are closely related. It is my belief that students who have experienced tutorial learning will tend to be those who feel learning can be, and should be, enjoyable though there is a need for structure and discipline. I hold this assumption from my own perspectives as both a student and a teacher. In my own educational experiences, I have always tried to maintain a positive attitude and not frown upon the necessary time commitment and extra effort needed to succeed.

In relationship to this study, I especially feel as though it takes a very committed, disciplined, and motivated young person to seek tutorial assistance. Many students may have the above traits, but personality preferences possibly play a monumental role in whether there is a desire to seek tutoring, how the experience is perceived, and generally,
a student’s overall success. It is particularly interesting to explore students’ perspectives on the tutorial learning experience and whether personality type preferences are a factor. I hope that by addressing tutorial learning from the tutee’s perspective, professionals in academic support positions can learn how to better serve the academic needs of students who request tutorial learning services.

An additional factor that makes my contribution to this study unique is the position that I hold at the university. As I previously mentioned, I teach incoming freshmen, I am also an advisor, and I previously held the position of assistant director of the Tutorial Learning Center. Because of the nature of my various responsibilities, I did have previous contact with some of the participants. I did not consider my job duties to be a limitation of my study, however. As an instructor, I had previous classroom contact with several of the participants and as an advisor I previously met with a limited number of participants for a very limited amount of time, from one to possibly three advising sessions that lasted no more than one hour each time. As well, it was because of my experience in the Tutorial Learning Center that I initially began my study. Still, I had not had any contact with any of the participants as tutees. By the time my study actually began, I had not had any responsibilities in the Tutorial Learning Center for three years.

**Overview of Methodology: Interpretivism**

Interpretivism naturally lends itself to qualitative methods. It is, in its simplest form, an ideal means of exploring individuals’ interpretations of their experiences when faced with certain situations or conditions (Woods & Trexler, 2001). To gather qualitative data in accordance with an interpretivist posture, I conducted semi-structured, open-ended individual interviews with volunteer participants. Qualitative interviews are
at the core of this study’s effort to examine how tutorial learning, as a traditional form of academic support, might be better utilized to enhance the academic performance of students at the university level.

The qualitative nature of the study allowed for the discussion of tutorial experiences to be analyzed according to the themes and patterns that emerged from the interviews. Themes are defined as important features that distinguish a case (Gall, Borg, & Gall, 1996). Patterns are defined as the observed variations in the phenomena that are systematically related to each other (Yin, 1993). Multiple methods of data collection, analyses, or theories serve as a way to ensure the validity of the qualitative data and establish trustworthiness. The process of checking is called triangulation (Gall, Borg, & Gall, 1996). Detailed information on the use of triangulation will be further discussed later in this chapter.

Research Plan

This qualitative study sought to investigate students’ experiences in tutoring. I was also interested in examining whether there is a relationship between students’ perceptions of their tutorial experiences and their personality types. With regard to the design of qualitative research, Marshall and Rossman (1999) assert that there are a wide variety of qualitative research genres, each having its own assumptions, methods, procedures, and considerations. They described qualitative research as naturalistic, interactive, humanistic, emergent, and interpretive. Although qualitative research is characterized by an emergent and flexible design, a basic research plan was necessary to guide this exploration. The following sections detail the research plan by discussing qualitative methods and the procedures used in data collection and data analysis.
Population

Students who have attended the tutorial learning center at a 4-year regional university in Southeast Louisiana were the targeted population for this study. More specifically, tutorial-learning students who have participated in tutoring during any given semester since 2000 were contacted for inclusion for the study. Those students who attended six to ten sessions in any given semester since that time were contacted as potential participants.

Sampling Procedures

Purposive or theoretical sampling is used in qualitative research to focus on the perspectives of those who are known to experience the phenomenon of interest. An in-depth exploration of an individual’s experience is the goal rather than being concerned with the ability to generalize their experiences to a larger population (Lincoln & Guba, 1985). Therefore, I targeted a sample of thirty-two individuals who participated in tutorial learning. The logic behind this decision was to gain an in-depth understanding of participants’ perceptions of their experiences in tutoring. The number was determined in an effort to have a minimum of four participants from each of the eight characteristics represented in the Myers-Briggs Type Indicator. In the event that potential students with particular personality preference characteristics are unwilling to participate, I contacted students who met the tutoring criteria and who could be identified as having the particular preference characteristics or types required. As expected, a second round of notification and request was conducted in order to reach potential participants for inclusion in the study. In an effort to reach the required number of participants, students who met the tutoring criteria and had a record of their MBTI profile, regardless of type,
were included in this round. A total of 35 students were interviewed, but because of difficulties with the audio and transcription process, of what would have been an additional three participants, I ultimately reverted to the original 32 planned participants. Once participants had been confirmed, individual interviews were conducted, lasting approximately sixty minutes.

Participants were given a variety of gift incentives in an effort to thank them for their participation. These incentives were in the form of small items valued at three to five dollars.

Sample

The targeted sample was those tutorial participants who met the following stated criteria:

(a) Attended six to ten tutoring sessions in any given semester since 2000,

(b) Took the Myers-Briggs Type Indicator and have a record of the type characteristics,

(c) Met needed type preferences in accord with the intended research,

(d) Easily available; lived within an hour’s drive of the college campus.

Data Collection

Qualitative research can be conducted by utilizing a variety of data collection techniques or by choosing one technique in particular. Marshall and Rossman (1999) suggested that data collection methods in qualitative research could be categorized into four types: (a) participation in the setting, (b) direct observation, (c) in-depth interviews, and (d) document analysis. For the purpose of my research, I utilized in-depth, individual interviews as the primary method of qualitative data collection. Coffey and
Atkinson (1996) suggested that data collection and analysis are best conducted simultaneously in qualitative research to allow for necessary flexibility. Therefore, data collection and analysis occurred in a cyclical process until concepts and themes became detailed and redundant and new information ceased to emerge (Miles & Huberman, 1994; Strauss & Corbin, 1998).

**Participant Selection**

The selection process began via a letter that I sent out to request participation. The letter packet included an introductory letter (Appendix A) and consent form (Appendix B) that could be mailed back to indicate willingness to participate. Additionally, the letter stated that a follow-up phone call would be received if I had not heard from potential participants within two weeks. Due to the significantly larger pool of potential participants than the number that was needed, it seemed unlikely that all criteria could not be met; however, in the event that potential candidates with particular personality preference characteristics were unwilling to participate. I planned to contact potential candidates as previously described.

I requested that those interested in volunteering as participants contact me via contact information as listed on the consent form developed for distribution to all potential participants at the start of this stage. Some consideration was also given to participant accessibility when I selected individuals to be included in this research project. An initial meeting place, time, and date was established for the convenience of the researcher and participant. Rooms were reserved in either the campus student union or library, depending on availability and/or participant preference, with consideration for minimizing distractions.
Establishing Contact

To ensure that the interviews proceeded properly, I made sure to have secured and verified with the participant the meeting place with adequate space, necessary equipment, such as the tape recorder, batteries and pad, and confirmed that all was in order the day prior to the set interview date. Furthermore, the establishment of contact is imperative for the interview participant.

The establishment of contact began with the initial interview. I again introduced myself, orally reviewed the purpose of the study, and read the consent form to the participant in order to verify willing participation by the interviewee. The initial interview then proceeded with the collection of demographics. I explained to the participant my intent to create participant profiles.

In-Depth Individual Interviews

To gain a detailed depiction of participants’ perspectives related to their tutoring experiences, I conducted individual interviews, each lasting one hour. These interviews were semi-structured and audio taped. The specific questions explored were included in an interview guide and are summarized in the following paragraph.

The individual interview questions were arranged from general to specific to follow a progression of participants’ experiences in tutoring. I asked: (a) How did you learn about the availability of tutoring services? (b) How did you decide to seek tutoring services? (c) How would you characterize your experiences in tutoring? and (d) Tell me about your impressions regarding the tutoring process. An interview protocol was utilized during the interviews.
Once data was collected through individual interviews, audiotapes were transcribed and transferred from spoken to written word to facilitate analysis. Qualitative data analysis procedures followed. The following paragraphs are dedicated to outlining the data analysis and procedures utilized in Phase Two of the research study.

Participant Profiles

After I met with interview participants and collected demographic data, I constructed a profile of each participant. These profiles included general information about their experiences, backgrounds, personality characteristics, and current educational status in order to develop an image for each individual. This served to introduce the participant and to facilitate a characterization to be associated with each individual. Having provided a description of the sampling procedures utilized in the study, I will provide a detailed description of the data collection and analysis process that facilitated the qualitative exploration of this research topic.

Portraiture

Qualitative methodology lends itself to multiple meanings and interpretations (Lincoln & Denzin, 1994; Merriam, 1988; Weiss, 1994). The focus of inquiry in qualitative research is the use of participants’ voices. Foremost, it is the voice of the participants that enables the researcher to study the phenomenon of interest (Lawrence-Lightfoot & Davis, 1997).

Profiles of the research participants were developed in an effort to enable the reader to formulate an image of the individuals who were willing to allow for their experiences to be recreated in this study. Research conducted by Lawrence-Lightfoot and Davis (1997) contributed to the presentation of participant profiles. In “The Art and
Science of Portraiture”, Lawrence-Lightfoot and Davis (1997) eloquently state the desire to bridge science and art. To accomplish this task as a qualitative researcher, portraits are shaped through the interaction between researcher and research participant, also called actors. The work of the portraitist, or researcher, is to combine the retrieved data with narrative that allows the reader to connect with the research by revealing the data in story form and from the participants’ perspective.

The stories unfolded as vivid descriptions of people who are real and who were willing to share their experiences in an effort to aid my study. The stories contain quoted information from the participants’ perspectives as they were entrusted to me for the intended purpose of the study. The documented stories were written as such in an effort to view the participants from their perspective as background for their academic pursuits and perceptions of the experiences they had as college level students who participated in tutorial learning.

While the profiles are written using a narrative form, as a researcher I approached the writing in accord with the data gathered from an interview protocol (see appendix). I chose to detail the profiles of the participants by structuring each one with identification and demographic information followed by the data retrieved from the interview and written according to the emerged themes. As I chose the data to be included, I looked for the similarities and differences that surfaced according to the coding of the themes. It appeared to me that the logical order of the discussion included in each profile would be to begin the story with the reasons that these participants chose to attend tutorial learning followed by their perceived relationship with the tutor, learning strategies gained, and the benefits derived from their tutorial experiences. As stated by Lawrence-Lightfoot and
Davis (1997) and in accord with the methodology of portraiture, I believed that the questions that follow were answered appropriately as I created the revealed profiles.

- Has contextual information been included as clarifying introduction to and edifying backdrop throughout the portrait?
- Has voice been sufficiently revealed and modulated so that it will inform but not distort the interpretation presented in the portrait?
- Have relationships been respected and faith kept with the actors on the scene throughout the shaping of the final whole?
- Do the identified emergent themes resonate throughout the language and culture of the actors on the site and do they adequately scaffold the interpretation presented in the portrait? (p. 265)

The submission of the profiles, while written in story form, was in keeping with the “methodological activities of the portraiture process” (Lawrence-Lightfoot & Davis, 1997).

**Data Analysis Procedures**

Data analysis in qualitative research has a two-fold purpose: (a) to understand the participants’ perspectives, and (b) to answer the research question. Marshall and Rossman (1999) defined qualitative analysis in terms of organizing and attributing meaning to the data. To accomplish these tasks, I followed the three-phase procedure described by Miles and Huberman (1994) which includes: (a) data reduction, (b) data display, and (c) conclusion drawing and verification.

**Data Reduction**

Data reduction is the first phase of qualitative data analysis (Miles & Huberman, 1994). Data reduction involved the process of selecting, simplifying, and extracting themes and patterns from written field notes, transcripts, and other available resources. To accomplish this task, I read and re-read interview transcripts while searching for similarities and differences in themes. Code names were assigned to those themes that
were detected and then organized into categories of related topics, patterns, concepts, and ideas that emerged from participants’ perspectives.

Data Display

Identified by Miles and Huberman (1994) as the second phase of data analysis, data displays are tools for presenting the results of data reduction. Displays are used to incorporate information into an accessible summary to facilitate later conclusion drawing. Display techniques include matrices and networks. Matrices are rows and columns of data that have been extracted from coded transcripts and are organized according to themes, complete with supporting quotations in support of the themes. Networks are charts that summarize information by providing a picture of reduced data, as it exists within the context of participants’ perspectives. The final decision for the technique(s) utilized in the study was made according to the results of data reduction. According to Miles and Huberman (1994), form follows function – meaning that particular techniques must be dictated by the research questions and emergent concepts. Once the appropriate technique was identified, data displays were created within each case or for each individual, as well as across each case, to demonstrate findings across all available sources of information.

Conclusion Drawing and Verification

The final phase of data analysis, according to Miles and Huberman (1994), consists of drawing initial conclusions based on cross-case data displays and then subjecting these initial conclusions to verification procedures. These procedures are intended to verify that findings are appropriate before they are labeled as conclusive results. In qualitative research, results are verified and deemed appropriate by evaluating
their trustworthiness. The following section is dedicated to discussing the establishment of trustworthiness of results.

**Trustworthiness of Results**

While quantitative research relies on measures of reliability and validity to evaluate the utility of a study, qualitative research can be evaluated by its “trustworthiness.” Coined by Lincoln and Guba (1985), this term is used to represent several constructs including: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability. A description of each of these concepts is included in the following paragraphs.

**Credibility**

The truth-value, or credibility, of conclusions in a qualitative study is comparable to the concept of internal validity in quantitative research. Lincoln and Guba (1985) and Miles and Huberman (1994) suggested that research results be scrutinized according to three basic questions: (a) Do the conclusions make sense? (b) Do the conclusions adequately describe research participants’ perspectives? and (c) Do conclusions authentically represent the phenomena under study? I relied on triangulation and member checks to enhance credibility. According to Lincoln and Guba (1985), triangulation is the corroboration of results with alternative sources of data. Consultation with an expert in the field was utilized as an alternate data source. Additionally, presenting results to participants during a concluding interview was to serve as a method to enhance the credibility of this study’s results.
Document Analysis

Document analysis refers to the documents, whether public or private records, about the participants in a research study (Creswell, 2002).

The retrieved documents used in this study were the MBTI profiles of student participants, student transcripts from the University, high school background information, and ACT or SAT scores.

The documents were reviewed as a means of gaining additional insight into the participants’ academic experiences prior to college as well as in regards to their perceptions of tutorial learning at the college level.

Transferability

Similar to the concept of external validity in quantitative studies, transferability seeks to determine if the results relate to other contexts and can be transferred to other contexts (Lincoln & Guba, 1985; Miles & Huberman, 1994). In this study, I sought to enhance transferability by providing a thick, rich description of the contexts, perspectives, and findings that surrounded participants’ experiences. By providing adequate detail to draw a well-defined context, I allow readers the opportunity to decide for themselves whether or not the results are transferable to other circumstances. By maintaining a detailed field log of all activities, contacts, and procedures, as well as keeping a current reflexive journal of my research experiences, I was able to provide enough description to enhance transferability of findings.
Reflexive Journal

Soon after the pilot study, I began a journal that I used throughout the research study. The purpose of this journal was to record the activities, ideas and decisions I made during the research process.

My intention was to use the journal as a master calendar of events as I made interview appointments, set deadlines, and identified the stages of my progress. Additionally, the journal became my personal diary of notes regarding my own perceptions, feelings, and interactions with participants.

Dependability

Similar to the concept of reliability in quantitative research, dependability refers to whether or not the results of the study are consistent over time and across researchers (Lincoln & Guba, 1985; Miles & Huberman, 1994). To address dependability in my study, I relied on consultation with a peer debriefer. The peer debriefer was asked to comment on all aspects of the study, particularly data collection, analysis, and results to determine if the conclusions were similar to mine. The peer debriefer was also asked to comment on the clarity of the research plan and its potential for consistency over time and across researchers.

Peer Debriefe

A peer agreed to review all aspects of this research project. The peer debriefer worked with me very closely, scheduled weekly meetings, during the proposal and pilot stages of my research.

As I entered the pilot study, we began to discuss the research procedures and as I entered the data collection and analysis phases of research, we reduced our meetings to
consultations used to review the general progress of the research study. As I shared my concerns about the research process, this also served as a tool to establish the trustworthiness and dependability of the study.

**Confirmability**

Confirmability assumes that the findings are reflective of the participants’ perspectives as evidenced in the data, rather than being a reflection of my own perceptions or bias. I enhanced confirmability by stating explicitly my assumptions about the topic of interest in relationship to my own unique contributions or as they were otherwise brought to my awareness.

**Summary**

This chapter presented a research agenda comprised of a qualitative methodology to address the experiences of students in tutorial learning on a college campus. A detailed research plan was presented, including descriptions of the qualitative plan and the plan used to guide these methods to produce a comprehensive investigation into personality characteristics and experiences of tutoring recipients.
CHAPTER 4
DATA ANALYSIS AND RESULTS

This chapter presents the findings from participant interviews as they related to the research questions composed for this study. The chapter consists of several sections. First, participant profiles were developed to introduce the participants who shared their experiences and aided this research. A summary of group characteristics is also included. The second section presents themes from a cross-case, followed by a third section that presents data as analyzed by MBTI type.

Throughout my interactions with participants, I felt it incumbent upon me to tell a story that enabled readers to make a connection with these students. The stories of these tutored students may help to dispel the stereotypes that accompany those individuals who received tutorial learning services on a college campus.

As a result of in-depth interviews, document analysis, and the use of a reflexive journal, the following student profiles emerged. The profiles represent the stories of those students who chose to go to tutoring and reveal how the experience impacted their learning. The names chosen for the individuals reflect my perceptions of each individual’s unique style, mannerism, or personal characteristics.
Student Participant Profiles

1. Talker – ISFP (Talker indicated prior to the interview that he wanted to do the interview, but might do a better job of answering questions on paper rather than to have a personal interview because he wasn’t very good at talking. Ironically, he talked more freely than any other participant.)

Talker, 49, entered the University as a non-traditional student who did not have to take the ACT. He was a public high school graduate, but no records of rank or grade point average were on file. At the time of the interview, Talker had a 3.200 cumulative grade point average.

He really tracked me down. Talker has a story that I would not have ever thought he had. I was aware that Talker had a physical disability because it is apparent that one exists. I did not know, however, that the disability is a hearing impairment.

From the minute Talker entered the door, he eased into conversation about himself and his educational experiences. Talker recalled childhood experiences as the prelude to his educational opportunities and mishaps. Talker was born with a hearing defect that was not immediately noted. Subsequently, he had some difficulties with school, with friends, and with jobs. He acknowledged math as a subject that he only “managed to make ‘passing grades’ in.” After graduating high school, he felt as though he didn’t want to attend college, but was well aware that “at this point in time, the workplace was not as receptive to people with disabilities,” describing himself as a “hard fit.” Now, as a non-traditional student who has finally made a successful start at college, he feels that he “can finally get an associate degree.” However, as Talker says, “Because my math is so bad I know that’s something I need to wade through.” Talker has
attempted math several times and identified the teaching style as a factor in his success [or lack of success] as well as his own lack of math skills. He realized that tutoring was a necessity and found the tutor to be “very good…very patient.” He said, “I know she wanted to pull her hair trying to help.” As Talker described his experiences in tutoring, it became apparent that he was also very comfortable with the additional audiovisual aides provided through the tutorial services. “I went there [tutoring] and watched all these films and I was learning more from the films and from tutoring than I was from the actual teacher.” Talker expressed sincere feelings of having received positive results from his tutorial learning experience. Although he still finds that “there are so many gaps, so many holes that I don’t [always] understand … but [I found that] the tutor helps enough to give a person enough confidence to be able to do a lesson most of the time, and … will try to help you learn it, maybe not the way it is in the book, but another way that’s easier for me to work with… cause I [still] remember how to do it now.”

2. Model - ENFJ (Model is tall and thin and, as the name implies, her appearance and persona was that of a model. She came through the doors of our meeting place with that model kind of look: gracefully, with her hair blowing through the wind and a casual, but cute outfit. She has a bubbly personality and was a joy to meet.)

Although Model is a non-traditional student and she was not required to take the ACT, she did. Model, 44, took the ACT three times with a 22 composite score each time and an 18 in math. The 18 on the math section of the ACT placed Model in the higher of two levels of developmental math. Model described several tutorial experiences, with each being a bit different. Model also audited a math class (002, which is the first level)
in addition to receiving tutoring. At the time of the interview, Model had a 2.077 cumulative grade point average.

Model was very relaxed as we began our interview conversation. She indicated to me that her reason for attending college is to become a nurse. “Actually,” she said, “I only completed the 8th grade in school and then got a GED and started to raise a family.”

As described by her MBTI type profile, she is a person who is responsive and responsible. The evidence of this lies in her willingness to repeatedly take the ACT, even though it is not required of non-traditional students, paying to audit a math class, and attending tutorial learning in math and other subjects as well. Particularly, for math, she has identified a weakness and, through many tutoring type experiences has realized that the tutoring experience improved as she increased her study time as well as her knowledge of the subject matter. Model expressed that she “had never had algebra so [she] had no foundation. My first [tutoring] experience was horrible, but last semester it was great.” Model specifically identified her own weaknesses as well as the difficulties she encountered as a result of the learning environment. As an adult learner, Model expressed her displeasure with the [un]structure of the tutorial lab, the lack of tutors at a critical time, and the unwilling [to help] attitude of the tutors who were present. Prior to my study, Model told me that she had written a letter to express her frustration and concerns because of one particularly bad experience. However, Model continues to look at her situation in a positive light. Overall, she feels that “no particular time was helpful …it was all helpful …” Model also concluded our session by stating specific recommendations that she felt would enhance the campus tutorial program. She feels that there is a need for individual tutoring as well as group tutoring, but also stated that
she “had fun in the group sessions.” She also identified a need for the tutoring to be set up in a way to provide more access for students who may not be able to come at restricted hours. Finally, Model provided an excellent example of student behavior and determination. She knows that it is her responsibility to master the subject and get the job done, but she also feels that campus services should be made available such that students are allowed the opportunity to receive help in order to succeed. Model ended by saying that “you [a student] won’t get it unless you go home and you do it every day - repetition, repetition, dedication- you have to realize that it is not something you can go in and do for 15 minutes… It has to be every day. I spent more time with the math tape this summer than I did with my husband. But the tutoring definitely helped, but it’s [also] knowing how to ask for the help you need.”

3. Spiritual – ESFP (I found that this person not only had a good spirit and a good heart, but also a really interesting, almost unbelievable story to tell. As we sat to talk and she, without delay, began to tell me about herself, first said, “I’m a gospel singer”.)

Spiritual, 48, received a GED and entered the University as a non-traditional student. No other records are on file. At the time of the interview, Spiritual had a 3.333 cumulative grade point average.

Prior to my meeting with Spiritual, we spoke on the phone several times. One particular day as I left the campus from another interview, I heard someone call my name. I did not recall having met this person, but somehow felt a connection. Spiritual introduced herself and then we hugged as though we were old friends.
I thoroughly enjoyed my conversation with Spiritual. She started by saying, “I really enjoy being at school, but it is hard. I am a devoted wife and mother. I have things at home still that keep me pulled, and I begin to feel badly about the time I spend trying to make school work.” Spiritual struggles with math and even though it is early in the semester, she is already beginning to have feelings of doubt about her progress. She has only completed one semester, her first, but this semester would be her third or fourth attempted semester. Her high average stems from her dedicated study in the courses that she took her first semester and she found to be enjoyable, even though she did have to put forth time and effort to study. One of those courses that she completed was English and her class grade was a “C.”

The Department of Languages and Literature is often referred to as one of the more difficult at the University. The other most dreaded department on campus is Mathematics and Computer Science. She would like to get a degree in childcare and preschool management, but realizes that math is part of that equation. Spiritual continues by saying, “the tutoring has been okay. It definitely helps me to at least start my homework and then I can try to finish things at home, but it is hard…this is not my first try at math… I’ve tried several times and just can’t seem to get this math…. [The tutoring] helps me understand the process a little better because the tutor will take me through the steps…. I used to go into the [tutoring] lab a lot, but it is just not always possible. It is a little discouraging when I do have time and go there and I don’t always get my questions answered. The group setting is not too bad, but I really need more time…I realize it is a process. I just pray that things will be better and I am not ready to give up. I’m going to give it my best.”
4. Star – ESFP (Star started back to school during a summer session. She was one of those students who just stood out from the crowd. Always cheerful, she was not only eager to be in school, but it was obvious that she was ready to do what it takes to be successful. She wasn’t coming back to school just to do it – she wanted to be an “A” student.)

Star, 36, attended a public high school, but because she entered as a non-traditional student, there is no record of high school background, nor did she take the ACT. At the time of the interview, Star had a 3.220 cumulative grade point average.

As we began our meeting, Star said that she had a young son in middle school, and she believed that her decision to attend college would also allow her to model the study behaviors and attitudes that she desired for him.

Star has progressed steadily since she began school. Her attitude is positive, she is happy to be in school, and she is very excited about her grades and the progress she has made. Star says, “I seem to attract the attention of other students, particularly older students, who want to do well in the classes that I take.” Star said that when she began taking math, it “was just over my head.” Because of her desire “to get on top of it,” she knew she needed help “in addition to what the teacher was teaching in class.” Once she signed up for tutoring, Star said, “She knew I was coming. I was going to be there with her every time [according to her scheduled tutoring time].” The Department of Mathematics and Computer Science gives a diagnostic test at the developmental level, which is where Star started her math classes. She soon realized that “He [the teacher] taught but he didn’t emphasize a lot of what was on the test… I didn’t know what a discriminate was….” Star expressed her experience in the tutoring by saying, “the
interactions with the tutor were good. They [the tutors] were hands on … and if I had a problem, I’d take it and talk to her about it…. She [the tutor] did a lot of problems on the board…she’d present it to us at a different angle or in a different way… and give us little shortcuts on some things and how to … figure it out….”

Star also mentioned that having “others in the group who had questions was also an added bonus.” Overall, Star received the information she needed and the enjoyment from learning that she is seeking. She works hard on her own, and she feels that she really does have the “keys for making good grades, such as good note-taking skills, use of index cards that I make to study from, and most of all, discipline.” Star adds, “I stay on top of things and I think …that is just my nature. I’m not here just to be here. I mean, I think I benefit greatly from tutoring …just to get that little extra bonus and understanding of it [math].” Star has progressed through the developmental math levels, and she is about to take a 100 level graphing calculator math course, followed by only one other required math left in her curriculum.

5. Cutie – ESTP (First impressions of Cutie will put him at 23 years and not a day more; what a surprise he gives you when you get to know him.)

Cutie is 33; he graduated with a 2.04 GPA from a public high school. He entered the University as a non-traditional student with no ACT and is currently in his fourth semester at the university. At the time of the interview, Cutie had a 2.429 cumulative grade point average.

I met Cutie on the very first day of the Fall semester. His older, mature side is not at all apparent in his physical appearance. Cutie looks very much like a teen, but speaks as though he is wise beyond his years.
Not only is Cutie 33 years old, but he is also a married man who has a high school English teacher as a wife. Cutie indicated that he had “been out of school for eight or nine years prior to coming to the University.”

He decided to come back to school because he was not happy with his job. He talked about his wife and the joy she seems to have teaching at the high school level, and he, too, has decided that he would like to become a teacher.

Cutie told me that he was “very excited about school and trying to get out as fast as possible.” Before reaching his goal, however, Cutie will have to master math. He recognized a problem from the first day of his first math class. The problem was not entirely his, however. He told me a rather grim story of how a class and the teacher simply get off to a rocky start and it just continues on a downward spiral. A multitude of factors could account for the classroom problems, but Cutie focused in on his own academic performance and the needs that he had in order to pass the class. He immediately thought, “Well, maybe if I take tutoring it would help me out,” and he continues to say “and it did.” Cutie discussed the tutor from the academic and the personal perspective. Academically, he found that “The whole experience was really nice….” In addition to the tutor and her methods, Cutie also identified the availability of worksheets, videos, and the computer. Cutie said, “I thought she [the tutor] did a real good job…. I think you have a better chance of learning something more when [on] a … one-on-one basis.” However, he did receive tutoring in a group setting and said that he thought it “was very much a plus because … in a much smaller environment …there was a more personal basis…and I really enjoyed it.” Cutie found that there were benefits personally as well because “there is a comfort level…. If you needed extra time, she was
there to talk to you more – even after tutoring was over.” He continues by saying that “Maybe just going to the Tutoring Center … could help a person out a lot because maybe you can talk more sociably … If you see somebody getting frustrated, …[you] can just take a break and … then go back to it after.” Cutie has found that he can now find himself thinking about math all day and if he gets a problem “stuck in [his] head,” he will “think about it until [he] figures it out.” Last, but not least of the remarks made by Cutie was that it certainly does not hurt to have someone behind you and motivating you and, for him, that someone is his wife.

6. Rewind – ESTJ (A woman on a mission: Rewind is playing back her tape, but this time she has a new perspective.)

Rewind, 37, a returning student, began her college career at another institution and after many years, has now decided to return to college. She applied and received approval for academic renewal. This removed her poor academic record from the past. At the time of the interview, Rewind had a 3.250 cumulative grade point average.

Rewind has become a force to be reckoned with. As the new semester began, her second year back, she is actively involved in her new environment. Rewind seems to just be happy. She is a person with “a new attitude.” While in her first semester back, she married – again, actually planned a wedding while taking twelve hours, married during a holiday break, and came back to finish the semester. All this not to mention that Rewind’s marriage also meant that she gained two children and now has four, all at home, all somewhere between elementary and junior high school.

Rewind begins her story by saying, “I’m here to finish something I should have finished a long time ago. So, I’m trying to get my bachelor’s and maybe my master’s
Rewind has “had tutoring for both math and English.” Since our focus here is on tutorial learning in math, Rewind tells me, “I know I needed [math tutoring] because I don’t like math. I never have. It’s not that I can’t do it; I don’t think I want to do it. So when I went to tutoring, it helped. And that’s why I sought it. I don’t like algebra. It’s never been a strong suit.” Rewind continues and says, “In the lab, it was mostly instructors, not student teachers that were in there. I think they had a few but I only went when a certain teacher was there.” “And,” she explained to me, “what she did was go over what I wasn’t getting in class, so, I learned a lot there as well as when I got home and I worked the problems. I could do it on my own without anybody telling me what needed to be done. I went there every day, no matter what day of the week it was. So, I did the homework sheets that she gave me and she sat down with me, when she was able to. I’m not going to say it’s like a one-on-one thing, unless you’re the only one in there, and nobody else is there. I would say about sixty percent of the time it was just me and her. As far as my point of view, I think I had a lot of success with it [tutoring]. It’s just that when I got there to test, I don’t know if I just froze up on the test, but it helped me a lot. It really did.” Rewind recalls “ah-ha” moments from her tutoring experience saying that there were times when she went, “Oh, yeah, I got it now. It was a few times; I would think that I got that…because of the way she showed me how to do it…. as opposed to the way the instructor or student teacher was doing it in the classroom … in tutoring. She’ll [the tutor] show you how to come to the answer in two steps and it would still be the same thing. As opposed to the ten steps the teacher would take you through.” Rewind was a talker. She did not need much prompting. She told me that she was “very comfortable every time [she] went [to tutoring]” and continued by saying, “I was willing
to be in there. I wasn’t forced to be [there].” Rewind did admit that she had to spend a lot of time with math by commenting, “I would have to sit there like two hours or something as opposed to if I’m studying for history or something else. I need to pay more attention to that math.” She goes on to say that the time and effort she spent with math can be contributed, in part, “as a result of …the tutoring process.” Rewind expresses her sincere dislike of the subject by asking, “Am I going to go in the workforce and [need to know] XY + ZT? I’m not going to do that unless I’m a chemist.” As we wrap up our conversation, we talk a bit about personality and the social aspect of tutoring. She responds by saying, “… yeah, that personality kicks in…. because if you decide you don’t want to do it [math], I don’t care who tries to teach you, it doesn’t matter.” But Rewind ends by pointing to the fact that in addition to receiving help with math, it is also important to her that her tutor still “holds a conversation with me. It’s like, we’ve been knowing each other or whatever. ‘How you doing this semester?’ and so on and so forth and stuff like that,” she says. “So, it’s not a time that I’ve seen her and she hasn’t – so that lets me know that she remembered me as a person, not just a student that came in there.”

7. Quiet Storm – ISFJ (Quiet Storm seems to be a very quiet, demure type person, but her strength of character became evident early and I would assume it grows in the process of getting to know her.)

Quiet Storm, 38, a public high school graduate, but no records are on file. She did not have to take the ACT as a non-traditional student. Quiet Storm has resigned from the University. At the time of the interview, Quiet Storm had a 2.000 cumulative grade point average.
Married to “an older man,” an employee of Wal-Mart; She decided that she wanted more and knew that to get more school had to be part of the plan. She has children and wants more for them than she has had herself. She is a concerned parent and her husband and children are definitely at the top of her priority list.

There is no question that Quiet Storm is devoted to her family. Even when she is talking about herself, it is evident that her family is at the heart of her goals and concerns about life. She admits that it “was kind of hard at first – being out of school that long” before returning as a college student. Quiet Storm recalls, “looking over my son’s math and he was showing me how to do graphing. He was all excited cause I couldn’t catch on. I told him that’s why I got a tutor… and that’s why I tell him he needs to go to college right after high school.” Quiet Storm felt that the tutoring was helpful as she commented, “they really care about what they’re doing. That’s what I found…. The tutor was very helpful.” Quiet Storm really got to become acquainted with her tutor. It seemed as though she was even proud of her tutor and who she was as an individual. She told me about the tutor’s family background from information she gathered in their conversations. As she recalled her tutoring experience, Quiet Storm said, “I saw that my grade was going down and I was struggling and getting aggravated – I thought I better go to tutoring. But, it was our teacher. She wasn’t really into math; she was just reading out of the book and writing stuff on the board, and she would thumb through the lessons and say, ‘This is what you need to do,’ but she [the tutor] took her time, and she was nice and slow with it, and she made sure that everybody in there knew what they were doing before she moved on to another step. That’s what I liked about her, she took it step by step.” Quiet Storm recalled a time after a test, “And I made a “B” on it and I was so
proud. And I went back and told her [the tutor] and she was proud, too.” Quiet Storm concludes our conversation by describing her tutorial experience by comparing the tutoring/teaching method she had encountered. “The teacher stayed at the board a lot. But, [the tutor] would ask us to go to the board a lot and show her that we knew what we were doing. She said, ‘If you have any problems with it, when you go to the board, I’m going to explain it to you, but, you’re going to be at the board because you get a better feel of what’s going on.’ I find that I want to do it thoroughly and accurately, and make sure I understand it before I move on. And that’s why I got into tutoring … I didn’t get it from the teacher so I had to go to a tutor to really understand it because I just really wasn’t catching on. But when I’m with the tutor – I …really understand it.”

8. Change - ISTJ (Reportedly, she’s been doing for everyone else for 30 years – now it’s her turn.)

Change, 48, received a GED and entered the University as a non-traditional student. No other records are on file. At the time of the interview, Change had a 2.400 cumulative grade point average.

Strong of stature and polished, she came to see me, despite having a personally upsetting day. She had made the commitment and kept her word.

Change began by saying, “What made me go [to tutoring] is I’m so behind in math. Math is not my strong subject, even in high school. I mean, I made A’s in everything except math. Math was like way down there.” She states that she even went to tutoring in high school and it takes her complete concentration and effort to do it. She talks about using the additional aids, such as the videos, as well as instruction from the tutor, and recalls very positive benefits from the videos because, “With the headphones,
there was nothing distracting me…. I just have to get my mind set to do it because I have to get through the math so that I can go further. After this semester,” she states, “I think there are only two or three more classes I can take without [completing] the math.”

Although Change acknowledges a need for help and the desire to get it, she did not seem to be extremely pleased with the services. For her, the tutoring setting was not conducive to learning. “It seems like every time I went to the lab, it was full. It was full of students and they had like three or four teachers in there helping. And with everyone talking back and forth, I couldn’t concentrate. Well, it – it helped a little when I would listen, not with the teachers, [referring to tutors] but when I listened to the tapes.” One of the most important things she said that she learned was, “You learn to be more prepared; have the stuff you need with you.” Change states that she is a very organized person and she has really been enjoying her college experience. She has been successful in other classes and feels that she has a real skill for organizing notes and studying for tests. She said, “I wish math was just taking notes, because I’d pass it, too.”

9. Tyler - ISTP (Mary Tyler Moore comes to mind – even the look, but its not really the look, but the persona.)

Tyler, 41,is a public high school graduate, but no records are on file. She did not have to take the ACT as a non-traditional student. At the time of the interview, Tyler had a 2.500 cumulative grade point average.

Tyler was very difficult to “get a hold of.” She indicated her willingness to participate right away, but getting her to sit down for an interview took at least two months. Obviously reluctant to talk and be taped, she said much more prior to and after the tape was off.
Tyler spoke to me about her lack of skill in math and said that she “did not even have to do this type of math when she was in high school, twenty-something years ago.” Now that she is in college, she is appreciative of the tutorial learning services provided on campus. She was happy to have a source of information and help because when she did not “get it in class,” she knew that “I’d get it through tutoring.” “And then if I didn’t get it [understanding of the material] through tutoring, in one session” she said, “I would feel as though I would the next time.” Another positive aspect of tutoring, according to Tyler, was the availability. “… If we had a test, we could go back to tutoring and they would help you understand … It was very helpful. I really enjoyed it.” She added that it was nice “to have a place to go and they’d explain stuff to you so you could go home that night and do homework.” Additionally, Tyler found the tutors to be “really good – really friendly.” One of Tyler’s disappointments with tutoring, however, was that there was not always someone there who could “sit down with you.” Tyler did say that there were times that an appointment could be made in order to “go to our tutor and she could help us the rest of the way and really get us through it.” She stated that [she] “was very lucky with the tutor I have. She taught us the same way the teacher did. She used the board a lot. It was a lot of visual aid. You know, she’d show us how to do – everything was visually done.” Tyler also added that she needs to have an explanation of how and why to do something and then she could do it, but also “the tutor’s personality had a lot to do with it, too. You can tell – she just wasn’t there for a job.”
10. Reluctant – ISFP (Reluctant agreed to participate, but hesitated to talk.)

Reluctant, 38, attended and graduated from a public high school, but entered the University as a non-traditional student with no prior records. At the time of the interview, Reluctant had a 3.000 cumulative grade point average.

Reluctant was quiet. As I left for lunch one day, Reluctant saw me and just as I was to get on the elevator, she inquired as to my name. I turned, replied, and we then had several minutes of back and forth about “when we could do this” [the interview]. It later occurred to me, after deciding to just do it at the moment, that was probably what she wanted to do the entire time. I probably would have not even gotten another chance at it.

Hoping to ease Reluctant into interview mode, I asked her to tell me a little about herself and why she was in school. She said, “[school is] something I always wanted to try but was always too scared. I feel like a 10-year old that’s into everything.” As the conversation progressed to math tutoring, Reluctant told me that, “It probably was the first test. I felt I just needed that extra help. I like the backup more than just the class … because the teacher would just say what he had to say; he wasn’t really explaining enough. I just needed more explaining, more help and more details…. [because] there were a lot of things I didn’t know …and he wasn’t going to take the time to do it.”

Reluctant made reference to her math background as a factor and said that she needed to re-learn the simplest things. Needing to gain the skills necessary to do the math was priority but, also, Reluctant identified the tutoring setting as a way to provide some structure to study time and do so in a stress-free environment. She “liked being able to …go in tutoring because the tutor would work the problems and I could kind of like pay attention to what she was doing on the board…. In class … I was so busy taking the notes
I really couldn’t concentrate on what he was teaching [or] on what he was actually doing. So when I’d get to the tutoring lab, it was like, just sit there and listen to her actually doing it – working the problems, and I found it helped me – a lot.” Reluctant continued by saying the tutoring provided her an opportunity to “just pay attention to the process.” Reluctant went on to say that just as her math class started out large, so did the tutoring group; as the semester progressed however, both groups got smaller and before the semester ended, “it was pretty much one-on-one and she and I developed good rapport with each other…She made me understand what I needed to learn.”

11. City boy – INTP (City boy is from a nearby city, but likes the small community and atmosphere provided at this University. He suggested we meet on a Saturday morning at the coffee shop.)

City boy, 23, graduated from a public high school and attended a community college prior to entering the University. City boy took the ACT once and had an 18 composite. At the time of the interview, City boy had a 2.100 cumulative grade point average.

We met at the “Coffee Table” (a local eatery) on a Saturday morning. City boy told me that he came here because it was economical, provided a friendly environment, and the small campus was a definite plus.

City boy was one of the few traditional students who agreed to participate in the study. He was charming, relaxed, and most willing to talk in an effort to assist me. He talked with openness and seemed to be genuinely pleased with the University as a whole. City boy was very personable and feels that he really does “fit” at this particular University.
When we began, City boy introduced himself and started right away to tell me something about his background. He talked about coming from a public high school that did not really prepare him for college. He told me that his average in high school was a “C,” but he has always loved to read, “magazines, books, -you know- I like it, I really do.” City boy is articulate and he goes on to tell me that he is a “first generation college student.” I find it interesting that he used this term and I assume that his reading must go beyond pop culture and fiction. He continues by telling me, “None of my family is educated. None of them have gone to college so, as far as them helping me [with college], none of them know what to do or how to do it.”

As we continue to specifically talk about tutorial learning, City boy tells me that he feels “there’s lots of help offered [at the University] and … that’s the big reason I came [here].” He begins his conversation about math by saying that he did not choose to participate in tutoring during his first semester and first attempt at math and now knows that he should have. He did not do well in the class and realizes that he could have possibly progressed with some assistance. City boy said, “I knew I would need help … [and now feels] there is no way I can do it without a tutor.” City boy feels like the tutoring “made a difference.” He believes that because the tutors can get to know you better “they look at you and start asking certain questions, doing the process…[and can] bend the explanations.” He also identified his creative spirit as a factor that does not always lead to his ability to “focus,” but in tutoring, “because the teacher [tutor] is focused on me, I’m going to be focused on her. I’m going to look her in the eye the whole time and give her my 100% because she is giving me hers.”
Lady - ISFJ (An adult learner who wears glasses, has very soft, baby-like curly hair. She is quiet, but very personable and, at the same time, very proper.)

Lady, 56, attended a public high school, but no prior records are on file. She entered the University as a non-traditional student. At the time of the interview, Lady had a 2.571 cumulative grade point average.

For some time we would meet, have small chats, and share information, but I actually did not know her name. She is currently in her third semester and has dropped the math again.

Lady and I were very comfortable with each other. Our past talks have always been pleasant and because we already had a bond, Lady described her trials with math without any hesitation. She began by saying, “Math has always been hard, but I really didn’t think it would be so hard though. I mean it is remedial math. I knew I would need to go to tutoring and I don’t mind putting forth the extra time and effort. I am just discouraged though. I mean the teacher should be there to explain.”

Lady has attempted math before and prior to the start of the semester, she was really happy to have finally gotten the teacher she wanted. As luck would have it, she is now faced with another dilemma; the class is now taught on the computer. Lady says, “It’s hard on the computer. My math is a computer math. You do all of your work on the computer and the teacher is just there to help if you run across a problem. I paid extra to take the computer math, but I didn’t think it would be like this. I really don’t know if I realized that the teacher would not be able to teach us just because it is a computer math class. I think he is frustrated, too.” Lady has utilized the tutoring services prior to this time as well. She has told me that while it is a good service to have, you don’t always get
good service. As we begin to talk about the tutoring specifically, Lady says, “Even though the tutors are there, it is hard. The lab is always full and if you can’t go at certain times, then you can’t get the help you need. I think the tutors really want to help, but it is too many people [students] in there for them to handle. I know that I am on a tight schedule. I ride the bus here so I come at a certain time and I have to leave at a certain time. It’s hard to fit it in but I try to every chance that I get.”

Lady also acknowledges the additional aids that are available and says, “I have looked at the videos and tried to get the math CD. Actually, I have the tutor disk, but I have had problems with it, too. I can’t load that CD on my computer at home. They stopped letting you take the videos home – I guess because they weren’t getting them back. It is really frustrating, you know. I am going to hang in there and hope that the computers begin to work better.” As we end our conversation, Lady says, “What I really wish for is if the teacher would just start to go to the board and teach. I know he is good – everybody says that he is one of the best math teachers. Before this semester he taught the regular math classes, you know. Now, this semester I get him, he is teaching the computer math, and because it’s on computer, he can’t really teach at the board and stuff like he used to. I’m just going to stay as long as I can because I know I need to do this.”

13. Widow – ESFJ (A widow with two children; her husband died when she was 39 and it was at this point that she truly began to think about her future.)

Widow, 45, graduated from a public high school, but no prior records are on file. She entered the University as a non-traditional student with no ACT. At the time of the interview, Widow had a 1.816 cumulative grade point average.
Widow told me that she wanted to participate in the study, but was unsure as to whether she should. She had attended tutoring and she did not find it to be a positive experience for her. She was concerned that there would be repercussions if she participated and said that she had not been pleased. After reassuring her that would not happen, we met to talk about her experience.

“What happens when the Social Security stops?” Widow says, “this was the thought that pushed me to school.” Widow had a small daycare business and managed her family until the untimely death of her husband. She told me he died in a car accident. Needless to say, it was unexpected. As we met she began to talk to me about having an early morning because this was the day she taught religion class – an early morning religion class – 6:00 a.m. Widow went on to say, “I’m also involved with the parent organization at the kids’ school, but I have learned that other things have got to go because I have my own schoolwork as well as still take care of the children.”

Widow admitted that she was “having a lot of trouble in math” and she also acknowledges that she had “been out of school for 26 years.” Yet, for Widow, tutoring only made things worse. She said, “For two semesters, going to math tutoring was not helpful.” The math tutor, according to Widow, “didn’t know what she was doing and, in fact, she was giving me the wrong information and that was even more confusing.” Widow said the experience caused her to get “very discouraged because I wasn’t getting the help I needed.” Widow said that on one particular occasion, the tutor “showed me something opposite [of] what was being taught.” Widow talked about putting forth a sincere effort to try and get help. She “went to tutoring at least three times a week for an hour.” Although her first tutoring experiences were negative, Widow is still willing to
give tutoring a try, but she is presently doing so with the lab tutoring. According to Widow, “The lab tutoring differs because there are teachers who tutor as well as peers who tutor.” Widow is much more comfortable with the teachers as tutors and says that her present tutoring experience is “awesome.” Widow feels the teachers who tutor are “more qualified and … can teach you.” Finally, Widow has passed the first level of Developmental Math and is presently in the higher level with “a B average.” Widow also feels other contributing factors to her present success are the open access lab and the personality of the tutor teachers. She says that you do not have to spend “an hour” at an appointed session time, but can “go any time of the day and they’ll help you.” Widow also states that in prior semesters she “thought you could just get the math without doing the homework,” but she now knows “Math is not something you can just memorize. You have to work at … everyday.” Though Widow’s tutoring experience started negatively, she is an excellent example of a student with determination. She persevered and continued to work through the system until she was able to overcome the problems.

Before leaving, Widow shares a positive math story with me. She recalls the day she made her first “A” in math and said that the teacher announced that there were two “A’s” and when her name was called, she could not believe it and asked, “Who?” Once at home, she was so still so excited that she says she went to the bus to pick up her kids waving her “A” paper.

14. Homegirl - ENFP (Homegirl, like me, is originally a north Louisiana girl. She is down-to-earth and feisty.)

Homegirl, 45, is a transfer student. She has attended two institutions prior to this one. The first was a junior college. No ACT score or prior high school record is
available. At the time of the interview, Homegirl had a 2.171 cumulative grade point average.

I finally met her. Homegirl responded after the first request letter but it took several months before we met. We spoke on the phone about meeting during the summer, but didn’t set up the meeting. Months passed and we spoke again and even this time had some difficulty coming up with a time. As I waited in the lobby of the library, I hoped that I had not missed her. She was obviously a busy lady with an agenda. I sat waiting, not knowing who she was. Finally, a woman walked in and went to the directory board. I considered briefly that this might be her, but didn’t go with it. She was dressed in pants, a patchwork shirt, boots, and was blonde. Knowing what I now know, I probably should have not second-guessed myself.

After taking care of the introductions, Homegirl and I got right down to business. In responding to her reason for choosing to attend tutoring, Homegirl said, “Desperation. Salvation … I just needed all the help that I could [get]…I knew it was going to be a struggle.” Homegirl also said that she had “put myself back [a level] in 002 [math].” In addition to putting herself back a level, she also attended tutoring during that time. She is currently in the higher level of math and has continued to attend tutoring. She said she likes to attend the tutoring sessions “because they help me with the problems. You can go in there and get on computers [also], … but I need the one-on-one from the instructor [tutor].” Homegirl says that she goes into the lab and one particular day she spent practically the entire day there. “I worked with four tutors one day…. I knew I couldn’t get it at home so I went in there and stayed and …they [the tutors] rotated their times…I had not eaten or gone to the restroom. I’d been in that chair all day long. That got me
my seventy-eight (78) [on a test].” However, Homegirl has one particular tutor that she really enjoys working with and says, “He’s been very patient.” She also enjoys working on her own by using “the computers” [to study]. Homegirl also talked about tutoring in other subjects, particularly, an Anatomy class that she is taking. She has a son who is at the University as well, and they are able to talk to each other about their college studies. Homegirl is very positive and upbeat. She goes on to tell me that she feels her tutorial experience has been “definitely positive … and I have worked with all of them [tutors].” With her various tutoring experiences, Homegirl said that she has had some times in tutoring that were not very productive, but she states that, “It was due to the fact that I just couldn’t grasp the concept. I was the one that overloaded.” Homegirl is referring to another semester when she had a difficult time and actually dropped the math. Homegirl thinks one thing that is positive about tutoring is having the chance to “get different …techniques from different [tutors].” It is obvious that she works hard as Homegirl described some of her study techniques. Not uncharacteristically, Homegirl told me that she needed to watch her time so that she could make another appointment, but before leaving, she said that “the tutors help to build your confidence and its my support group…the tutoring …it makes you change your attitude towards… math. The more I understand and I’m able to do it - that whole attitude changes from negative to positive.”

15. Sweet – ESFP (This young lady just seems to be a sweetheart. She is soft-spoken and kind with a petite frame and wide smile.)

Sweet is only 21, a public high school graduate with a 1.78 GPA, she took the ACT two times, with the higher composite being a 14. At the time of the interview, Sweet had a 1.125 cumulative grade point average.
As we sat waiting on each other – each on opposite sides of the library lobby, I actually observed her not knowing that she was my participant. Prior to asking before assuming the person didn’t show, she was in conversation with another young lady, obviously a friend, and as the other person left they hugged. It was a brief, but special moment – Not just for me to witness, but also, seemingly, for them as friends.

“I came to [the University] because I’m a Culinary Arts major. I’m trying to get a business degree and not strictly a culinary degree. And then I’d like to study abroad.” Sweet continues to tell me about herself by saying, “I’m very outgoing. I always want to do stuff and make things happen. Like some things wouldn’t happen if I weren’t in the middle of it - in the situation – I guess.” As we continue our conversation and move on to her tutoring experience, she expresses her pleasure with tutoring. She referred to math as “a hard subject for me, one that I’ve never understood.” Sweet says that she “thinks it’s [math] pointless for what I’m in college for.” When I asked Sweet to tell me about her tutoring experience, she replied with several examples of how the tutoring proved to be a positive experience. With math not being a subject that she is fond of, Sweet finds it helpful to attend the tutoring sessions. She identified some of the benefits as having only a “few people, … [getting] attention, and interaction, learning to study differently, and helping her to organize her work.” Sweet also told me that if she did not go to tutoring, she knows that she would probably procrastinate and not do the homework. Sweet ends our conversation by saying that “The tutoring did help me out in terms of formulas, and techniques and steps and stuff. It gives me more confidence. Tutoring helps because somebody’s going to actually … explain it to me. I know that they can stay [with me] to explain it [until] I can understand it.”
16. Slender – INTJ (As the name implies, Slender is an extremely thin young lady.)

Slender, 20, is considered as a traditional student who was a public high school graduate with a 2.62 cumulative average. She ranked 55 out of 334 and was in the 84 percentile of her high school class. Slender took the ACT and scored a composite of 15. At the time of the interview, Slender had a 1.850 cumulative grade point average.

Slender was very quiet. Even though she tells me that she is not doing well in her classes, it appears she has not yet tapped into her potential.

As we begin, Slender talks with concern about her progress in school. Slender said, “presently, I am a General Studies major, but I plan on changing to psychology… this is my second year here, third semester… I’m still a freshman. I’m not doing as well as I could be in my classes.” She continues to contemplate a change of major even as we talk. Slender goes on to say again that she is thinking about changing her major and she also likes dance. Then she says, “That’s what I really want to do, but I know it’s hard getting into that kind of stuff.” As we shift to talk about math and tutoring, Slender says that she “can do it in class, but I can’t really get it outside on my own … so I thought maybe if a younger person could help me [I could better understand it].” Unfortunately, Slender did not find this to be the case. She entered group tutoring, but said, “I guess she [the tutor] couldn’t really remember the stuff that she was doing. She really was no help.” Slender identified a possible reason that the tutoring did not benefit her and that stemmed from being in a tutoring group that “didn’t have the same teacher,” even though everyone was taking the same level of math. Slender also stated that the tutor would “ask us – and I would be thinking that’s what we’re here for – to get help.” Slender went on to acknowledge that this was possibly just a method of tutoring, but it was not an
appealing method to her. Slender thought that the tutor should have been the authority or that “she could have given us homework to bring back the next time or something, but she didn’t do that.” Slender said that she “really did not know how to study,” and while there was very little that she liked about tutoring, she “did learn how to study math … [during that time], but not from the tutor.” Slender went on to say that she is independent, but realizes that sometime she does need help. “But basically,” Slender says that she discovered that “If you work problems over and over again … you will remember it.”

17. Dreamer – ISFP (Dreamer is goal oriented. She wants to do well. She wants to succeed despite obstacles.)

Dreamer, 20, took the ACT five times and the SAT once. Her composite score on first ACT was 12 and eventually increased to 15. Her total score on the SAT was 680. She attended a public high school, graduating with a 1.71 high school GPA. She is currently on academic probation. At the time of the interview, Dreamer had a 1.860 cumulative grade point average.

Dreamer is quiet but friendly. She wanted to go to an out-of-state institution and chose this one during her senior year because of the recruiting efforts made for her to come. She has progressed and feels good about it and about being here. Presently, Dreamer is a student worker in the tutoring lab, but as a clerical worker, not a tutor.

Dreamer speaks with appreciation about this opportunity to be in college. She always wanted to attend college and never thought that it would not happen. As we begin to talk, Dreamer smiles and she tells me that she is “an Elementary Education major … [and she is] currently in MATH 101.” Dreamer started her math at the lowest developmental level, but she has progressed steadily. Dreamer is proud to tell me about
her progress and goes on to say, “I like math. It’s a good subject, but I thought I was going to have a lot of problems so I just went [to tutoring].” Her dedication to learning becomes apparent when she let me know that she would stay after class to “ask the teacher to do …problems” as well as stay after tutoring sessions “overtime, to try and get help until I could understand … especially days we had a test.” Dreamer was also pleased with tutoring because “the tutor made it fun and we would talk about other stuff besides math – we [she and the tutor] were close until she graduated.” Dreamer “felt [that] all the sessions were good because I’d learn what I wouldn’t get in class. And, if I didn’t get it that session … then I’d get it the next…”

18. Unique - ISFJ (Tall, thin, and an obviously unique individual.)

Unique, 38, a public high school graduate but no records are on file; has military credits. Her high school GPA was 2.02. She entered the University as a non-traditional student with no ACT. At the time of the interview, Unique had a 2.700 cumulative grade point average.

Unique is a student who I had run across from time to time, but did not really know personally. After some reflection, it seems that we had even had some prior interaction with each other. It was pleasurable to chat with her. She said just what she felt; it was evident that she did not sugarcoat things. However, her demeanor was down to earth, the same way she looked; it was in her talk, her walk, and her appearance.

Unique jumped right into the heart of the matter. She told me that she has worked hard and accomplished much. She “started her math at the lowest level of Developmental Math and has had tutoring for each class.” Unique is presently in MATH 101 and has started attending tutoring sessions for this course as well. Her feelings are
not as positive this time, however. Unique said that in her other classes she “made A’s so
[she] “thought [she] missed out on something,” not to have A’s in math also. Unique is
happy to tell me that she has really performed well academically, including in math
classes. This semester’s math class has not been the same though. Unique said that she
has not been doing well in MATH 101, nor has she found the tutoring to be working for
her. Unique feels that there is one major reason for the difference in tutoring and that is
the way it is structured. In the Developmental Math levels, the tutoring is set up as a lab
situation. In the 100 level tutoring, the tutoring is more structured. Students sign up to
go at a particular time with a particular tutor and that tutor is usually a peer. Unique says,
“I don’t like it [tutoring]… because it’s students teaching students and sometime they
[will] leave something out. [In the other tutoring] the other tutors are teachers. I feel …
like a teacher might know where a lot of people fall in that category [knowledge of
problem areas].” Unique does not feel that students have enough experience with the
subject or with students to make good judgments when diagnosing problems that a
person might have in the subject. Unique does say, as she wraps up her conversation,
that to her, “Tutoring is just what you get out of it and sometime it’s hard for you to put
forth a maximum amount of effort [if the tutor cannot reach you to help].” She adds that
she has to take “responsibility for [her own] work. Even though I’m not getting anything
out of it [tutoring] right now … I am determined to continue to go … and work devotedly
to see it through … [because] it’s a responsibility I owe to myself.”
19. Chief Cook – ESTJ (Chief Cook loves to cook, but his dream is to be in a management position while in the kitchen.)

Chief Cook, 45, graduated from a public high school. He is a transfer student, but no records are on file. He entered the University as a non-traditional student with no ACT. At the time of the interview, Chief Cook had a 3.100 cumulative grade point average.

Chief Cook states that he found himself changing jobs every three to five years, and after being laid off in October 2002, he decided to return to school upon the advice of an unemployment officer under the WIA program.

Chief Cook begins by letting me know that he has done well academically since he entered the University. He says, “I do not want to make less than a 3.00 [average]…. So, instead of bombing on tests, I’d rather go [to tutoring] and try [to] understand it better.” Chief Cook has mixed responses about his tutorial experience. He began by stating that his “tutor gave [him] the impression that she didn’t really understand what I was trying to tell her.” He went on to say that, “in hindsight, she helped enough to give me the confidence to know that I could do it … on tests.” Chief Cook thought that possibly because the peer tutors had not done the simpler math in some time, that they could not relate to some things that a person at the lower level might need. He commented that he “needed someone to show [him] step-by-step.” The tutor, according to Chief Cook, was “good,” but was not always able to get down to the level of explanation that he needed. As we concluded, Chief Cook said, “Sometimes you need to let things sit and think about them and then you realize that, oh, yeah, this is actually because of tutoring that I am able to work these problems now … So, I mean, it was a
little negative, but yet the positive came out because now I can do the material on tests that I wasn’t doing … before.” He also stated that his own initial fear [of math and tutoring] had dissipated and this was probably a factor that also helped his present success as well. As Chief Cook continued to reflect on his tutoring experience, he said, “The right impact would be for me to improve my grades on the tests. Before, I was thinking I would make a “C” on this test, but I’m thinking an “A” or a “B” now.”

20. Mannerable – ISTP (Mannerable is a mild mannered, calm, and very polite individual.)

Mannerable, 35, is a public high school graduate, but no records are on file. He did not have to take the ACT as a non-traditional student. At the time of the interview, Mannerable had a 1.897 cumulative grade point average.

A licensed mortician, Mannerable moved to Louisiana from the state of Michigan. He is one of the most calm, pleasant, and sincere individuals that anyone could ever meet. He returned to school to further his education, but even more so, for him, it was seemingly the desire to have the companion of people – living people; to have a social setting that would provide the by-product of intellectual stimulation. He had to have thought this was a win-win situation. Although he does not have the strongest academic record, he definitely seems to know that one of the keys to success in education is persistence. He is beaming with pride just because he is here. He sees this as an opportunity that is fun, rewarding, and challenging. The challenge is what makes it fun and rewarding. He rises to the challenge semester after semester with the attitude that he will persist. He is one who has made a personal commitment to make the most of this – to go for it and chew up all that is good and just spit out the bad.
“I decided to come [here] … to pursue a Bachelor of Science degree in General Management.” Mannerable is very appreciative of the people and the services that are provided at the University. His entire conversation is a giant compliment to the University. Mannerable is the kind of student that you would want in your public relations campaign. As he begins to talk about his tutorial learning experience, he does say that he “had a hard time at first” and “one of my weakest classes was English.” Mannerable said that he had “a lot of help … through … tutoring…. It’s been very - very good – It’s been excellent.” Mannerable does acknowledge the help received in tutoring from “the students [who] do the tutoring.” He points out that “They’re very, very helpful. If they see that you’re trying, I'm not saying that they are going to give you anything, and I don’t expect anyone to give me anything here at this University, but if you’re making an effort, they’re going to help you.” Mannerable remembers talking “about … different resources [on campus]” with one of the professors when he initially entered the University. Mannerable recalls the professor having said to take advantage of services and he decided he would do just that. Mannerable says, “… I basically just went to them and said, ‘Hey, I need Help.’” As we ended our conversation, I asked Mannerable what he considered as successful and unsuccessful about the tutoring and he replied, “I’d say it was successful when I passed the class. The only time I’d say it is unsuccessful is when I don’t feel like I’m not getting the one-on-one attention.”

We end our conversation with Mannerable saying, “I want some A’s.” He says that the tutor once told him, “Mannerable, you … have a good attitude, … you’re dedicated, and …you’re serious.” This comment made Mannerable beam. He was very
proud to have been recognized as this type of student. I certainly don’t know how many A’s Mannerable will get but the tutor certainly did identify his strengths.

21. Early Bird - ESFP (We met at 7:30 in the morning. She was as perky as a little bird.)

Early Bird, 38, is a public high school graduate, but no records are on file. She did not have to take the ACT as a non-traditional student. At the time of the interview, Early Bird had a 2.857 cumulative grade point average.

Early Bird is in the midst of a divorce and she just got back her children. She either cannot afford or does not believe that watching the TV is good, – no sitcoms, no news – just movies, somehow this came up as we began to talk. Although Early Bird is having a bit of a rough time, she is having one of the happiest times of her life.

When we set up the interview time, Early Bird told me that she could meet me “after she dropped off the boys at school and before she needed to get to a job at about 9:00 or 9:30.” We talked a bit about my study on the phone and she said she would see me then. We met at the library and, at 7:30 a.m., there was not much traffic so we immediately spotted each other. Early Bird quickly settled in to tell me her story. “All right, I’m majoring in Nursing. I feel like it’s taking me forever, but I’m not [a] full time [student this semester].” Early Bird quickly told me, “Yes, [I] definitely got something from it [tutoring]. I was in there almost every day. My first two tests in math were a ‘C’ and a ‘D’ and I finished with a ‘B’.” Early Bird identified her desire to be in tutoring as a support in case she had problems, not because she actually did have problems. She also found that it was supportive to have the help of the other students who were there to be tutored. She said, “We kind of all sat at the table and we kind of all helped [each other].”
Finally, Early Bird says, “I know … [there are] a lot of students in class that failed and dropped out and never came here. But… it helped me to get out [of math].”

22. Hope – ESFJ (Hope has kept the dream alive.)

Hope, 45, received a GED; no prior records are on file. At the time of the interview, Hope had a 3.429 cumulative grade point average.

How can this person best be described? Unbelievable, Amazing, maybe just very interesting? One thing is for sure; you would not look at her and think that she has the story that she has. It is like she blew in from another time and place and she is ready to take on the brand new world that she has found. The saying, “Never let them see you sweat” comes to mind when I think of her. She is simple, somewhat unassuming, and at the same time she is huge. There are these two different sides and the right one comes out to play just at the right time, every time. Only a multitude of adjectives, all saying different things, can capture this woman.

I asked Hope to begin by telling me about herself and she started by saying, “I’m roughly about 44 years old. I’m not sure. I returned back to school to get a degree in Nursing.” She continues by saying that she needs to “get a job and work toward retirement … [to get] good health insurance.” Hope said, “I don’t want to work for nothing so I came to college.”

Moving on to the subject of math and tutorial learning, Hope says, “I don’t care for the tutoring department. Even when … it was one-on-one, I did not feel that the instructors are doing their jobs.” Hope did not find the tutors as being “approachable.” Although Hope attended tutoring in the lab, she feels like it would be better if “there were student tutors in there [the lab] instead of instructors.” She “still goes to the lab”
sometime, but, in addition, she has decided to hire someone on a personal basis as well. Hope feels that she is getting more from the personal tutor than she does from instructors who tutor in the lab. Trying to bring Hope back to the topic of campus tutoring services, I ask Hope if she can describe a successful and an unsuccessful time in the tutoring lab. She responds by saying, “I have some success when I go to the tutoring lab and … watch the instructor that is on videotape.” Hope adds, “the instructor on the video is doing it by the book. They should just have those things [videos] lined up in the hall. You could just go and sit in the hall and watch a video and leave.” Hope also has found the additional worksheets beneficial. She says that “[when she has] brought the worksheets home and completed them they have helped [her] with the understanding of math.” Hope describes herself as talkative, emotional, and harmonious. Even though she loves people and she loves to talk, Hope likes to have peace so that she can concentrate when she has work to do. “I like it quiet and peaceful. I like everything around me organized … so that I can just sit down and peacefully study my work.”

During our conversation Hope had previously mentioned that the lab environment was crowded and noisy and she could not work well when she was there unless she had on the headset when watching the video. Hope ends our conversation saying that she is making “high grades in everything else,” and when she gets back a “D” on her math tests, she does not feel the encouragement and praise that she wants to receive from being in school.
23. Stilt – ISTP (Stilt is very tall. He is an international student who came here to play basketball.)

Stilt, 20, is a traditional age student from Australia. He finished from a private school in 2001. Because this is his first semester, Stilt does not have a recorded current cumulative grade point average.

From Sydney, Australia, Stilt says that he is here to play basketball. He is also still working through the language, customs, (particularly the slow, southern, Cajun customs that come with a small town and a small University), and the academic setting as he settles into the USA for the first time. This is the first time he has been away from home, away from family, and away from what he knows. He says he comes from a working family. He had “graduated and started to work construction in the family business,” with a dream to play basketball. This is how his story began.

His journey to this small, regional University seemingly began rather haphazardly. Stilt told me that a friend who had been exploring the U.S. universities told him about his search and this place that he might check out. The friend, who also took his search from the Internet to making a few physical visits at various universities, never came to this one. On the other hand, sight unseen, Stilt just decided this was the place for him and he came on over.

Stilt described his experiences in tutoring by first telling me how he arrived at the decision to attend tutoring. “Basically,” he said, “it was the fact that I was struggling in Algebra.” Since Stilt is an athlete, he and his coach discussed tutoring as an option to try and help him get a grasp of the subject. He is a quiet, rather shy person and said that another thing that led him to tutoring was questions that he had in class, but rather than
ask he would write notes to himself. Also, Stilt mentioned that with his time commitment to basketball, “it was difficult to put forth the extra time needed for the subject.” Stilt finds the tutoring to be “a guide to fill in the blanks … from class and gain some little tricks of Algebra.” Stilt described his early sessions as difficult. He has since recognized that the barrier in learning probably related to a lack of communication. However, he has now “settled in a bit and [he also] goes to tutoring on a regular basis.” Now that Stilt has “gotten an idea of what goes on in each session,” he says that he [goes to the session] “more prepared.” Stilt says that now that he is better able to communicate his problems, the tutor is better able to help him “break them down … and … that sticks in [his] mind.” The tutoring sessions are “more comfortable now and that makes it easier to learn.” Stilt said that communication and “repetition” are contributing factors to his present success in tutoring.

24. Wisdom – ISTJ (Wisdom remembers the words of her grandmother as she moves through life. She is serious and sincere about her academic progress.)

Wisdom, 30, is a public high school graduate who entered the University as a non-traditional, transfer student. She has no high school GPA record. She has an ACT composite score of 19. At the time of the interview, Wisdom had a 3.000 cumulative grade point average. Wisdom has now become a math tutor.

Wisdom is a very dedicated student who is wise beyond her years. In addition to her full time status as a student, she works several jobs to finance her education.

It was a joy to chat with Wisdom. She is the rare gem of undergraduate students. Wisdom grew up with her grandmother and it is obvious that she holds to the values she
was taught. Wisdom is a strong, independent person who believes that the basic things in life are the best; things like honesty, hard work, dependability, and trust.

Being the stand-out student that she is, Wisdom said that she went to tutoring as a way to productively spend her time reviewing math. Even before the semester starts, Wisdom will sign up for tutoring. Wisdom first entered tutoring because she wanted to be sure that after having been out of school for 12 years, she would be able to pass her math and English. “I had an ‘A’ average,” Wisdom says, “but I went to make sure that I had the understanding that I needed.” Wisdom also states that she does not go there to play. Her first semester in tutoring she could have had a bad experience if she had let the tutor determine her fate. She was unhappy, but instead of just putting up with what she had or deciding to drop the tutoring session, she complained to the counselor and ended up being tutored by the coordinator. Wisdom now has only one more math class to take before she has completed the necessary math courses for her curriculum. She feels very good about her tutorial experiences, but it is obvious that she guided the process and made it be a positive and beneficial learning experience. Wisdom says, “… one good thing about it [tutoring] was they [the tutoring staff] …work with you….they…helped you in the way that you needed them to help you.” One of the most positive benefits that Wisdom gained from her tutorial experience was learning to work through her math tests. She said, “[I learned] how to not struggle on one problem for 20 minutes, [but] to figure out the easier problems [and move on through the test]… They taught me to use ‘time management [during the] test’ and to decrease my anxiety.” Wisdom goes on to talk about her own responsibility in learning and said she always worked through her homework and went to tutoring just for clarification and correction. Wisdom wanted to
receive positive feedback as soon as she could. Most importantly, she put forth the effort
to perform at her highest level possible. She committed to going and even on days when
she had no questions, she went anyway. Wisdom says, “The one thing that my
grandmother has always told me is that the only thing you have is your word…If I say
I’m going to do something, I’m going to do it….I knew it [coming back to school] would
take some work… [and] you have to work at anything you want to accomplish…. If I
hadn’t gotten into tutoring, I may not have been able to get through my tests the way that
I did. Math is something you have to learn – Its just concepts.” Wisdom ends our
conversation by telling me that because she has performed so well in each of her math
classes, she now is on the other side of the tutoring experience and she is now a math
tutor. She hopes that she can be a good influence for those who now come to her for
help.

25. Helpful – ISFJ (Helpful was eager to help. He is a young man with a lot of
potential.)

Helpful, 20, graduated from a private high school. Helpful’s high school GPA
was 2.81 and he ranked 36 out of 71 in his class. He has an ACT composite score of 21.
At the time of the interview, Helpful had a 2.385 cumulative grade point average.

Helpful diligently looked at his planner to be sure that he would be able to make
our appointment. He is only a freshman, but he is a mature, respectful person who was a
pleasure to talk with. He commented that he believed in helping people.

Helpful begins to tell me about himself and his reasons for coming to tutoring and
as he does so, I realize that he has an older brother on campus as well. In addition to
needing the help with math, Helpful says that his brother had previously used the tutorial
services and told him that he should too. Helpful thought that if his brother would see the benefit of tutoring, he certainly would because, according to Helpful, the brother “got a much better education in math when he was in high school than I did.” Helpful goes on to tell me that he says this because he went to a different high school than his brother did but beyond that, Helpful says, “During Junior year [in high school]…. I had four different teachers and they [the teachers] ended up giving everybody in the class a ‘C’.” Helpful adds, “Algebra I … and II …are real important.” He does not feel that his math background is up to par and “knew for sure [that he] was going to have tutoring for math.” Although Helpful did well enough on his ACT to go directly to college Algebra, he says, “I don’t know how I got into 101 because… I just guessed on everything.” When going on to talk about tutoring, Helpful begins by saying, “I would have failed or I would have dropped if I was not in tutoring. I would have dropped for sure.” When asked about the tutoring experience, Helpful expressed some difficulty when he first started. He implied that there was a slight communication gap as well as having to work through the group tutoring method of not getting attention because “one person monopolized the session.” Once that began to work itself out, however, Helpful began to feel very good about the situation. He found that he “could relate to the tutor” and even having the group session evolved into a very positive tutoring situation. Helpful ended our conversation saying that “tutoring definitely helped and he would recommend it to any student.”

26. Go-Getter - ESTJ (He is very impressive. I would assume that Go-Getter has already been successful in the business world and is ready to move up the ladder with a degree.)
Go-Getter, 36, received a GED and entered the University as a non-traditional student, but no records are on file. Go-Getter took the ACT and he made a composite score of 16. At the time of the interview, Go-Getter had a 3.200 cumulative grade point average.

Go-Getter was interesting. Before we actually started the interview, Go-Getter told me that he really had not had a good day. His pet dog had died. He was genuinely sad and said that although people see him as a strong, outgoing, party type, he is human and does have a sensitive side.

As we eased into our planned conversation, Go-Getter gave me an extremely vivid picture of his efforts to do well. “Initially, I went to the lab for tutoring. As usual, there is paperwork and I did go through the proper procedures…. I received the [computer] disk [for math], … but that wasn’t enough. The tests were coming quickly, material was coming quickly, but my knowledge was not moving as quickly. I kind of put together a study group when I realized that there were students that had a real good grasp on the material.” Finally, Go-Getter begins to talk about his tutoring experience, but basically says that he simply “added the campus tutoring to his list of resources for gaining ground in math.” He does state that, “I got a good tutor … and [it] has helped me.” However, Go-Getter was not very pleased with having a non-designated person as a tutor. “They [the tutors] rotate, which is something I did not like because you couldn’t get familiar with anybody… There was no rapport with the random tutors.” However, Go-Getter is presently going to tutoring and he has been assigned a specific person as his tutor. He says that now he has an excellent tutor and his “only problem with her is that she is not going to be able to tutor me next semester.”
27. Apprehensive – ISTP (She, as I expected, was nice, but sounded rather apprehensive about the interview and, at the same time, was agreeing to participate.)

Apprehensive, 34, graduated from a public high school, no prior records are on file because she is a non-traditional student. At the time of the interview, Apprehensive had a 2.000 cumulative grade point average.

I met Apprehensive several semesters ago, probably about two summers ago now. She was the kind of student that I wondered about – a very quiet, polite, average student. She smiles when acknowledged and for the most part, goes on about her business. At the time of our initial contact, I spoke to Apprehensive on the phone. Apprehensive and I went through several possible interview dates before coming to terms. Of course, as luck would have it, the first date got scratched. Again, we talked once or twice and finally agreed on an evening in a newly constructed public library. The facility was beautiful. After waiting, I thought she would not show. Now, I was the one who was apprehensive. Another 15 minutes passed and I saw this woman walking toward me. I was actually a bit uncertain about whom she was until she came closer, with her pleasant, but apprehensive face. We exchanged niceties and proceeded into the main entrance of the library. My first words were of the surprise I had to see that Apprehensive was expecting a baby. We talked about the fact that she was pregnant and how that excitement is slowed during the summer months. We also talked about another student who might be a possible participant. She informed me that they were friends who decided to come back to school together. Apprehensive began by saying, “I am also going to summer school in New Orleans this summer.” She made the trip to New Orleans every day. I was
somewhat shocked to find that she had this kind of determination, but began to see her in a totally new light. It became apparent to me that, yes, as an adult learner, she not only had the determination, but the resources and wherewithal to overcome the obstacles she faced by the system.

Apprehensive went on to say, “I am really trying to get this degree. My husband has a degree and I think it’s time that I have one, too.” As she continues, she says, “Math has always been hard for me. I had a hard time with math even in high school. I guess I knew I needed to go tutoring after the first test. There is a lot of homework and I had been trying to keep up, but it is really hard. There is so much homework. After the first test and I didn’t do so good, so we [along with a friend] decided to go to tutoring. I just had a hard time. I still didn’t really get it and I didn’t think she [the tutor] really gave us enough time.” Apprehensive again reflected back on the amount of homework and physical time that it took to study math. Referring to tutoring, she said, “It was not one-on-one or like me and my friend. It was at least three or four people in our session. Sometimes people were not really on the same thing or had the same questions, so you had to wait for her to get to you and sometime it just wasn’t enough. I wanted to go and I thought it was okay, but not really. I mean, I wasn’t understanding a lot more than what we went through in class.” As we began to wrap up, Apprehensive thought back to her sessions and said, “I guess I needed more time. She did give us extra handouts sometime, but not all the time, but I don’t think that was it. I felt like I needed to get the homework first before going to other stuff anyway. It seemed like my friend would be understanding [the math] and then we would work some more later on. I don’t really know. I guess tutoring was okay, but I wish I had had more time.”
Skeptical – ISTP (She was skeptical of what I wanted because we have visited with each other before and, oddly enough, the conversations concerned math.)

Skeptical, 47, received a GED. She has no prior records on file. She did not have to take the ACT as a non-traditional student. At the time of the interview, Skeptical had a 3.167 cumulative grade point average.

I first met Skeptical about two semesters ago. From our very first meeting, Skeptical talked about her problems with math. It was not until I actually saw Skeptical at our interview that I remembered who she was and why we had met.

Skeptical has not had a positive experience with math or tutoring for math. She feels that she is doing her best, but she is not getting anywhere. From the very first semester of her college career, Skeptical has been disappointed by the need to take math and from her perspective, the lack of assistance that she has received. Although she has attempted tutoring, she has never felt comfortable in the tutorial environment or the classroom. Skeptical began taking math her first semester and with her lack of skill, combined with an international instructor, she felt doomed from day one. She attempted to get help from tutoring, and she tried other study aids, such as using the computer software, but nothing worked. Skeptical dropped the course and decided to try again later. Now, Skeptical says, “I stuck in there through the long haul this time. I … stayed in [the class and tutoring] and participated 100% … until the drop date.” There is something to be said about her character and stamina because each semester since her first, Skeptical has registered for math, attempted to do the work, and dropped by the drop date. She is presently considering going through this process again.
As we begin to talk specifically about tutoring, Skeptical says, “My experience in the tutoring lab [she contemplates before continuing] … the majority of the instructors [tutors] were helpful and very knowledgeable. There were a few that seemed like they didn’t want to give the output…either they were too tired or maybe they tutored students who were not promising and they just didn’t feel like they needed to waste their time. I don’t know.” Skeptical continues and tells me that there are too many students to one instructor and it is physically impossible to help everybody.

On the bright side, Skeptical has found one particular male instructor whom she described as a person who “would just go over and beyond … what he was supposed to do…” Overall, however, math and the tutoring experiences that Skeptical have had have not been beneficial. She is very uncomfortable with the group-tutoring situation and she is very unhappy with the math instruction in class, but yet, she is willing to continue to try. She says that next time she tries tutoring, however, it will be with an outside agency.

29. Queen - ISTJ (Friendly, young single mother. She is determined to make the best of this second chance.)

Queen, 30, is a public high school graduate. She had a high school GPA of 2.27. She did not have to take the ACT as a non-traditional student. At the time of the interview, Queen had a 2.250 cumulative grade point average.

Queen had mixed emotions about her tutorial experience. She stated that, “As an older person … I really need …one-on-one help.” Queen says that “They [tutoring staff] try to accommodate students,” but she feels that this only makes it harder because there are so many students who need help. She finds that “You’re always sitting there with your hands raised and …it really gets frustrating because you’re trying to get it [the
information] and they are always running around.” Queen tells me that a positive aspect of the tutoring is the additional aids that are available. She says, “I borrowed the CD. It was helpful.”

Queen concludes by saying she “feels that the tutoring is helpful, but … it can be better.”

30. Mom - ISTJ (She is attempting to maintain her class schedule in the midst of a divorce and keeping up with her four children as well.)

Mom, 30, is a transfer student who is from the Virgin Islands. She did not have to take the ACT as a non-traditional student. At the time of the interview, Mom had a 2.810 cumulative grade point average.

Mom is studying Culinary Arts. Mom conveys her tutoring experience to me by first giving me an account of the math classes that she has taken so far. Actually, she has really accomplished a good bit, considering her personal situation. Just to set up the story, Mom lets me know that “Math was never a strong subject [for her].” As she continues, she details her progress saying that in her first semester, she “passed with a ‘C’ in… 002, [continued] over the summer and took 003 so that [she] could take 101 during the current semester.” Mom was moving right along until she had to “readjust … my plans” when her oldest son came to live with her. At this point, Mom had more Mom duty to handle and “began falling behind” in her own study. Mom went on to discuss her tutorial learning experiences and commented that she “definitely believed it was beneficial.” Mom described the entry process as well as the overall program saying, “They put me on a schedule and they were friendly and courteous… [Also], I was reassured that they would be willing to help in whatever way they could.” Mom only had
one major concern and that was the group-tutoring set-up. She had assumed that she would get more time only with the tutor and really did not realize that there might be as many as four people in her session. “That was kind of discouraging,” Mom said. Ultimately, however, Mom was pleased with the services and “even after dropping the class went back in [to continue receiving help].”

31. Sister - ISTJ (This young lady speaks of her brother lovingly and frequently. It only seems befitting to lovingly refer to her as Sister.)

   Sister, 33, received a GED. There are no prior records on file. She did not have to take the ACT as a non-traditional student. At the time of the interview, Sister had a 3.659 cumulative grade point average.

   Sister has had several experiences with tutoring on campus and interchangeably talked about both at the same time. She told me that she started to utilize the tutoring services “because of …financial assistance received to do so.” After going, she said that she began to realize “how important it was [for her to go],” and she says, “I went a lot.” Comparing the walk-in lab to the assigned setting, she indicated a preference for the structure. She was most impressed that there were additional worksheets, tapes, videos, and CD ROM’s for students to also use and said, “They [the program] are very organized.” The other setting she described as “not organized…. They don’t have things for you to do. They have worksheets, but I’ve never seen any answer sheets.” Sister is very complimentary of the services. In her final analysis of tutoring, she described several instances of success. Sister also thought that the methods used in teaching the concepts were extremely good, especially since the tutor “tries to learn about your
foundation … and work from there.” In concluding her thoughts, Sister said, “Before, I couldn’t focus, but now I will stay and work a problem until I have it resolved.”

32. Cherokee –ESFJ (This is the daughter of one of the last tribal chiefs who was chosen, not elected, by his peers.)

Cherokee, 42, received a GED so there are no records on file. She did not have to take the ACT as a non-traditional student. At the time of the interview, Cherokee had a 2.111 cumulative grade point average.

Cherokee has a very interesting family background which I enjoyed hearing about. Cherokee also cooked dinner for me at her home, introduced me to her family, taught me a little history, and gave me her perceptions of tutoring at the University.

Cherokee had experienced tutoring in both math and English and although she knew the focus was on math, she just could not resist telling me about English. Cherokee is an individual with a very positive outlook on life and an attitude of faith. She talks about the blessings in her life and even in talking about math and tutoring, she wanted to discuss the positive more so than the “not so positive.” This meant that she had no choice but to talk about her tutoring in English equally as much as she did the math.

As I attempted to keep her focused, she told me that she chose to go to math tutoring because “The math class that I was taking was a bit too fast for me. And with other …personal problems that I was having I thought that I really should get a tutor or go to tutoring classes to try to get a grip of the math that I was taking.” Cherokee went on to say that “… the teacher was … an excellent teacher but she just taught… She just zoomed right through classes. And if we wanted extra help, we basically had to get it ourselves.” Cherokee was disappointed to find that in her attempt to get the extra help
needed, the tutor was rather abrupt and non-caring. In addition to this, Cherokee did not feel that she was receiving the necessary [skills] assistance in math. She recalled one incident by saying that the tutor told her, “Look, don’t miss another class because you know I’m not going to go over anything that I’ve already covered.” She said that her response was to say, “Well, you know, I thought this was one-on-one [tutoring] and if I had any questions, I thought you were going to answer.” Obviously there was a communication problem and Cherokee ultimately dropped both the class and the tutoring session. Cherokee ended her thoughts on the math tutoring by saying, “I think our personalities may have clashed.” On the other hand, Cherokee could not have been happier with her tutoring sessions in English. We talked a good bit about the differences in the two, and she felt that there were a few main differences: “The tutors in English were more mature, the session was one-on-one, the tutors gave [her] additional study material and help and, most of all,” according to Cherokee, “They cared…and whatever I needed is what they attended to.”

**Group Characteristics**

This portion of the chapter presented the participant profiles. The participant profiles were created as a result of in-depth interviews with college level tutorial learning students. The profiles were presented as a guide to the analysis and results of the data gathered. A summary of the group characteristics is presented in the following table.
TABLE 1

GROUP CHARACTERISTICS AND PARTICIPANT TYPE

<table>
<thead>
<tr>
<th>Participant #</th>
<th>Name</th>
<th>Type</th>
<th>Age</th>
<th>Current College GPA</th>
<th>Gender</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Talker</td>
<td>ISFP</td>
<td>49</td>
<td>3.200</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>2</td>
<td>Model</td>
<td>ENFJ</td>
<td>44</td>
<td>2.077</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>3</td>
<td>Spiritual</td>
<td>ESFP</td>
<td>48</td>
<td>3.333</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>4</td>
<td>Star</td>
<td>ESFP</td>
<td>36</td>
<td>3.220</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>5</td>
<td>Cutie</td>
<td>ESTP</td>
<td>33</td>
<td>2.040</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>6</td>
<td>Rewind</td>
<td>ESTJ</td>
<td>37</td>
<td>3.250</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>7</td>
<td>Quiet Storm</td>
<td>ISFJ</td>
<td>38</td>
<td>2.000</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>8</td>
<td>Change</td>
<td>ISTJ</td>
<td>48</td>
<td>2.400</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>9</td>
<td>Tyler</td>
<td>ISTP</td>
<td>41</td>
<td>2.500</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>10</td>
<td>Reluctant</td>
<td>ISFP</td>
<td>38</td>
<td>3.000</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>11</td>
<td>City boy</td>
<td>INTP</td>
<td>23</td>
<td>2.100</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>12</td>
<td>Lady</td>
<td>ISFJ</td>
<td>56</td>
<td>2.571</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>13</td>
<td>Widow</td>
<td>ESFJ</td>
<td>45</td>
<td>1.816</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>14</td>
<td>Homegirl</td>
<td>ENFP</td>
<td>45</td>
<td>2.171</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>15</td>
<td>Sweet</td>
<td>ESFP</td>
<td>21</td>
<td>1.125</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>16</td>
<td>Slender</td>
<td>INTJ</td>
<td>20</td>
<td>1.850</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>17</td>
<td>Dreamer</td>
<td>ISFP</td>
<td>20</td>
<td>1.860</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>18</td>
<td>Unique</td>
<td>ISFJ</td>
<td>38</td>
<td>2.700</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>19</td>
<td>Chief Cook</td>
<td>ESTJ</td>
<td>45</td>
<td>3.100</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>20</td>
<td>Mannerable</td>
<td>ISTP</td>
<td>35</td>
<td>1.897</td>
<td>M</td>
<td>B</td>
</tr>
<tr>
<td>21</td>
<td>Early Bird</td>
<td>ESFP</td>
<td>38</td>
<td>2.857</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>22</td>
<td>Hope</td>
<td>ESFJ</td>
<td>45</td>
<td>3.429</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>23</td>
<td>Stilt</td>
<td>ISTP</td>
<td>20</td>
<td>First Sem.</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>24</td>
<td>Wisdom</td>
<td>ISTJ</td>
<td>30</td>
<td>3.000</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>25</td>
<td>Helpful</td>
<td>ISFJ</td>
<td>20</td>
<td>2.385</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>26</td>
<td>Go-Getter</td>
<td>ESTJ</td>
<td>36</td>
<td>3.200</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>27</td>
<td>Apprehensi</td>
<td>ISTP</td>
<td>34</td>
<td>2.000</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>28</td>
<td>Skeptical</td>
<td>ISTP</td>
<td>47</td>
<td>3.167</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>29</td>
<td>Queen</td>
<td>ISTJ</td>
<td>30</td>
<td>2.250</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>30</td>
<td>Mom</td>
<td>ISTJ</td>
<td>30</td>
<td>2.810</td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td>31</td>
<td>Sister</td>
<td>ISTJ</td>
<td>33</td>
<td>3.659</td>
<td>F</td>
<td>W</td>
</tr>
<tr>
<td>32</td>
<td>Cherokee</td>
<td>ESFJ</td>
<td>42</td>
<td>2.111</td>
<td>F</td>
<td>W</td>
</tr>
</tbody>
</table>

W=White; B=Black
Thematic Analysis

The data analysis procedures began once the interview data was converted from audiotapes to transcribed text. Data reduction began with reading and re-reading the transcribed data. The themes began to emerge with the initial reading of each transcript. Next, an open coding procedure was utilized for the identification of emergent themes. The four emergent themes developed as follows: (1) choice to attend, (2) relationship with tutor, (3) learning strategies and (4) derived benefits of tutoring. In addition to these themes, the data also suggested the existence of categories and patterns. The categories and patterns indicated that these students’ perceptions were often two-fold: the perception of the current tutorial experience as well as the perception of the implications of that experience was a manifestation of the participant’s long term goals. It was apparent to me that participants, each in his or her way, showed a strong sense of their character and unique personality. This was obvious in their determination to achieve the necessary grades in math so that they could continue on the path to achieving their degree. The development of themes as described by the voices of the participants provided thick descriptions of their tutorial learning experiences. The pages that follow present the experiences as expressed by the participants and are the major findings that emerged in accord with each theme. The quotes from the participants are written, to some extent, in everyday vernacular. They are presented in this style to allow the reader an opportunity to draw on the reflection of thought given to the participants’ responses.

Choice to Attend Tutoring

Participants revealed that their choices for attendance in tutorial learning were generated from a lack of skill in the subject of math that snowballed into the need for
tutoring. In some cases, the participants indicated that they had just been away from the subject too long. In other cases, the participants just knew that this was a subject in which they had never done well. In either case, the underdeveloped math skill produced a lack of confidence. Ultimately, however, each of the interviewed participants had the desire to succeed and was willing to put forth extra time and effort to make it happen. The following excerpts reveal how participants made the choice to attend tutorial learning sessions.

City boy, who was one of the more recent high school graduates, identified his lack of preparation starting from high school. City boy attended a public high school and after graduating high school, City boy, who made an eighteen (18) on both his composite score and in the math section of the ACT, attended a community college prior to entering the University. City boy’s comments follow:

I’m 23. My average grade in high school was a “C” average. I don’t know if you remember anything about high school, but they sure didn’t prepare us for college as much as they should, first of all. I knew I would need some help just because my math in high school wasn’t that great. I always struggled in math during high school. So, I knew being out of school for 3 years and not really using anything but a regular calculator – I knew I would need help.

Parallel to the comments made by City boy, Helpful also referred to his high school background. However, Helpful attended a private high school and was the most recent graduate in the group, May 2003. Helpful’s ACT composite was twenty-one with a score of eighteen on the math subscale. When asked how he arrived at the decision to attend tutoring, he responded by saying:

There are a couple of reasons – my brother went and that’s – and he got a much better education in math when he was in high school than I did. Like I said, I went to a different school. During my junior year, when I was supposed to take – even when you take Algebra I – I had 4 different teachers and they ended up giving everybody in the class a “C”. So I knew for sure I was going to have tutoring for math. I don’t know how
I got into 101...Because I had – I just guessed on everything on the ACT. I knew that I had to get help with math. I knew I wouldn’t be able to do it by myself. (Helpful has an older brother who also attends the University).

Mom echoed a history of lacking math skill and she also added:

Actually, what happened is my first semester – I did – I passed with a “C” in 002 and over the summer I took 003 so that I could take 101. During the summer I realized I was really falling behind because on the exams, I wasn’t making passing grades. So, I decided to go and try the Tutoring Center. This semester, since I was taking 101, I definitely need to cause I – actually, I took more classes than I should have.

My “Star” of the group, said:

Well, I took a math class. That math was just so over my head. I needed a little bit of help in addition to what the teacher was teaching me in the class. And I just felt that that’s what I, you know, I needed to get on top of it and that’s what I … I did and that’s what she did.

Among all of the comments surrounding the choice to attend tutoring, probably the most animated response came from Homegirl who said, “Desperation. Salvation. I just needed all the help that I could get. I knew it was going to be a struggle.”

Finally, there was Wisdom who spoke as a deviant voice of the group in terms of ability, but she indicated a lack of confidence. Wisdom stated, “I had an ‘A’ average, but I went to make sure that I had the understanding that I needed. Tutoring was something that was a supplement to the instruction.”

There were a variety of comments generated just by this relatively simple question, but repeatedly, the voices replied that a lack of skill in math was the dominant reason for attending tutorial learning. The participant’s implied that the choice to attend tutoring, particularly for math, was not really an option. It was a necessity because math is a university requirement that must be completed to progress.
Relationship with Tutor

One of the most prominent themes to emerge was that of the Relationship with Tutor. Most participants stated that their experiences with tutors were positive. However, there were deviant voices that held opposite opinions. Although some voiced negative relationships with the tutor these voices also spoke volumes about the significance of the tutorial relationship formed.

Quiet Storm stated the following:

You know they really care about what they’re doing. That is what I found in my tutor. You know – she is very helpful. She made sure that everybody knew what they were doing…that’s what I liked about her. I made a ‘B’ and was so proud and when I told her, she was proud too.

Rewind continued in that same vein:

Well, in the tutoring session, she [the tutor] worked with that person individually. Even though we were sitting at the same table, the tutor would go answer your question and that person’s question like that. Unless it was like 3 or 4 people from the same class working together; she would sit there with them and try to answer their questions. I was very comfortable every time I went. I was very comfortable with her as a person and the way – her methods of teaching. It made it easier for me to study when I got home. By her being the person she was, or is, I was making sure that she was there at the time that I went because I could understand more of what she was telling me. I could relate more to her than, for instance, somebody else. And I stuck with her when she was in there. When she wasn’t in there, I would wait until she would come. Now, when I see her in the hallway, she holds a conversation with me. It’s like we have known each other or whatever. She lets me know that she remembers me as a person, not just a student that came in there.

Dreamer shared like comments:

The tutor made it fun. She made it interesting. I used to stay overtime to try and get help until I could understand. We were close too. Like we would talk about other stuff besides math. We were close until she graduated.

Helpful stated that:

She is [the tutor] real, real – really, really nice. She’s probably one of the better tutors in there. She is really good and she’s a real good person. She knows – she can relate to me easily. She knows what I’m talking about. Sometimes you might ask the
teacher a question and they don’t know what you’re talking about. Yeah, it’s been good. To start off with it was a little rough and a little hard. But as you – get more – I guess it depends on the subject too. But, as you get more into the subject, you and the tutor can relate more easily. Now she knows exactly what I mean, exactly why I don’t understand the problem before she even works it out.

Cutie responded in the affirmative as well:

You can be more of a one on one basis. If you needed to ask her a question she was there. She was there to tell you where the answer is – and if you needed extra time she was there to talk to you more. Even after tutoring was over, she did a real good job. I think you have a better chance of learning something more when you have just a one on one basis. One time this last semester, I was kind of like just towards the end and I was having trouble in one of the sections and I went in and I was actually just going in to work on a computer to kind of catch up – I was a little behind – and one of the ladies actually sat down with me and like helped me go through the section again. I didn’t even really ask for her help. She just saw I was kind of frustrated. And maybe just going to the Tutoring Center could help a person out a lot because maybe you can talk more sociable like you know – maybe like 2 or 3 minutes ask them how is their life going or something you know. There’s a comfort level.

However, Cherokee went on to reveal that the tutor relationship did not form as expected. This participant did not agree with others as to a positive Relationship with Tutor. After requesting that the participant tell me something about the interactions with the tutor, the following comments were made:

“Well, they really weren’t good. The tutor, I don’t remember who she was, but I did feel like, you know, when -- when we first -- when I first walked into the class, she was fine. But then when I came in late, or if I skipped a class, she, well, said, ‘Look, don’t miss another class because you know I’m not going to go over anything that I’ve been in.’ And I said, ‘Well, you know, I thought this was one-on-one and if I had any questions, I thought you were going to answer.’ She says, ‘Well, that’s true, too, but don’t miss, you know, miss my class because once we drop you, you can’t get back in.’ I’m like, ‘Okay.’ So, with all the problems that I was having with her...I think our personalities may have clashed. That could have been one reason.

This participant went on to further discuss the experience she had with an English tutor that was, as she described it, “awesome.” “I really enjoyed my tutoring classes with the English tutors, both of them. They were very helpful, very, very -- they -- they took care of my needs. And when I was -- whatever I needed, you know, they took care --
they supplied me with extra literature for me to come home and -- and read and go over
and, of course, they would go over it with me. And you know, they just explained
everything in total detail. Yes, it was really awesome.”

There were similar concerns voiced by Skeptical. Skeptical’s comments follow:

The first time I took it [math and tutoring] was my very first semester, which was
last January. I dropped the course. I did attend tutoring during that time, but there were
not enough instructors to go around and they had a lot of people in the tutoring classes.
Now I am doing it again. I stuck in there through the long haul this time. I stayed in and
participated 100%. My experience in the tutoring lab – um – the majority of the
instructors were helpful and knowledgeable. There were a few that seemed like they
didn’t want to give the output – the time. Either they were too tired or maybe they
tutored students who were not promising and just did not feel like they needed to waste
their time. I don’t know. It was pretty much the same both times. You find yourself
sitting in there for hours and maybe just getting a little help here and there. There was
one instructor in particular who was always there on Wednesday’s. He just went over and
beyond. He’d stay later than what it was supposed to be open and there were times when
he went without lunch and stuff. He would stick around and not once did he give you the
impression that - well – I’m not going to waste my breath because this student is not
going to pass. He just kept trying to do his best to help you. That, I had a positive
experience with – the positive day was on Wednesday. So other than that, the negative
days were all the other days.

Also, Hope was one of the participant’s who expressed negative feelings about
her experiences in terms of her relationships with the tutors. She said:

I don’t care for the tutoring department. I feel that there are not enough people
there and not enough instructors to give you the attention you need. Because when you
look at a math problem, it’s not just the answer, ‘oh, that’s a negative – and go on your
merry way.’ I need somebody to help me work through the problem and they are not
there to do that. No interaction occurred. You can’t have any sort of relationship with
any of them. They don’t stand there long enough. I mean, I don’t even know their
names. They’re not approachable. There are more instructor-tutors in the lab and I think
they would be better off if they had tutors instead. Put these tutors in there that – that are
“A” students that are in 101. I have gotten my own private tutor and she is a student here
and she is in math 101 now, or maybe higher. I have learned more from my tutor who is
in math in fifteen minutes than I have learned the whole time I’ve gone to the tutoring
department lab. I still go to the lab if I can’t afford to pay my tutor or if she is not
available. I do try to go to the lab, but if you go in there you’re going to do homework
because you are not going to get any help in there.
The perception of the majority of participants expressed that they experienced positive interactions with tutors and they felt more comfortable in the tutorial environment than in the classroom. Participants revealed that they preferred to have a one-on-one tutorial, but generally indicated that even the small group setting was within their comfort zone and tended to be beneficial in most cases. As the above excerpts show, participants in tutorial learning have a need and a desire to have positive relationships with their tutor. Good communication is essential for both parties and collaboration, rather than competition, is an essential component of peer tutoring. Most interesting in the responses relating to tutor relationships was how or why the relationships formed as they did. Often, the factors that were voiced by participants included the ability of the tutor to explain the subject matter and relate to the tutee as an individual. The next theme gives evidence of learning strategies as a component of the tutorial learning experienced by participants.

**Learning Strategies**

Participants described the learning strategies that they experienced as a result of tutorial learning. The responses yielded a variety of comments. Excerpts from select participants reveal interesting points about the strategies of learning.

Queen said:

I borrowed the CD. It was helpful. I found the CD was very helpful – more than the teacher was – because it explains and tells you why.

Widow’s pride in her own accomplishments with math was also reflective in her comments about the learning strategies employed in tutoring:

When I first came, I thought you could just get the math without doing the homework. But now I know there is a reason to do the homework because that is how
you learn. Math is not something you can just memorize. You have to work at it everyday and do the problems to do it correctly. And in the math tutoring that I am getting now, they showed me how to do it. I guess you could say I need to be taught like I’m in kindergarten with math. I found that the tutors will sit you down and show you step-by-step – This is what you do – And that has been a big help. I am definitely comfortable with the learning methods that they use. I am definitely more organized. I do not procrastinate. I take each chapter and work on it and do the homework, going over homework, and doing practice problems.

Time spent with Star revealed her perceptions of learning strategies as follows:

She did a lot of problems on the board. And she did a lot of reviewing for us. If we had review questions, she did that. She knew what she was doing. And she would give us, not that I’m saying short-cuts, but she’d let – present it to us at a different angle or in a different way. ‘Well, look at it like this, you know, instead of like this.’ It was just little shortcuts on some things and how to figure it out.

Sister referred not just to learning strategy, but a preferred tutoring strategy as well. In reference to the variety of tutorial settings offered, Sister stated that the tutoring offered at night did not work. Instead, Sister said,

I think I do better with a structured tutoring situation. I’m very good about going because I know on Monday and Wednesday night, I have a class so I can kind of ask questions, and if I’m having trouble with my homework, you can just do homework in there. Plus it’s two math teachers in there when I’ve gone. There’s videos. You can watch videos. It’s really nice. I love the videos. In fact, I find the videos really help me in some cases more than the tutoring.

Sister continued saying, “It was just, um, I like the man’s voice…. Yeah, you know, because you could tell he’s not in an even tone. He kind of gets excited and…. You know, and he takes it at a pace that I can kind of understand with him.

Unique adds a different perspective by saying:

Say I forgot something – a concept – you have to try to figure out what you left out without her telling you. You have to do it step by step and if I do the problem wrong, she shows me how, but she wants me to try and do it first. It is a really good feeling to figure it out for myself before she explains it.

The tutorial learning process can be viewed as one of the support services that naturally lend itself to both academic and social development. The delivery of services by the tutor as well as overall program administration, however, determines whether
students identify with this assertion. The participants of this study have generated stories that reveal their perceptions of the benefits of tutorial learning as follows:

**Derived Benefits of Tutoring**

Participants identified a sense of success from tutoring in terms of how they felt personally, as well as how they did academically. A minority of the participants shared mixed to negative remarks in regard to their perceptions of the tutorial learning benefits. Those who commented in the negative usually had less than positive relationships with the tutor on a more personal level, rather than the lack of tutor skills.

Participants’ responses ranged from identifying success on the basis of improved self-confidence, to improved grade, to the opportunity to share information and communicate with other people.

Talker’s comments give an apparently vivid picture, “It’s like there’s so many gaps, so many holes that I don’t understand. Then I’d go to tutoring and it’s like, oh, okay.” Queen, who openly revealed positive and not-so–positive comments said:

I really needed help one-on-one and they [tutors] always try to accommodate students. You’re always sitting there with your hands raised and you get really aggravated and frustrated because you’re trying to get it and they’re always running around. It’s helpful, but I think it can be better.

Go-Getter replied:

What I’m using the tutor for right now is to gain the information I’m lacking in the classroom. I write notes when I’m in the class that I don’t completely get and when the subject material moves on and I’ve lost that material, I write myself a little note and I bring that to my tutorial class and I tell them, this is what I’ve missed.

Model provides an interesting perspective saying,

The more I got comfortable with the math, the more questions I ask [in tutoring]. At first, I would just sit there, listen to other student’s questions and try to figure out problems. I was totally lost. But overall, I’ve had different tutors and different tutoring situations and all of it was helpful to me.
Unique, who also had more than one experience with tutoring, said:

The tutoring did help me out while I was going to it, but I just got overwhelmed and I just stopped going to the [math] class completely. But I did take the tutoring in the -- the one that offered the next semester … Yeah, and that was a big help to me, too. You could go in – they had sheets, you know, things you can study off of and things you can look over. If you got on the computer, it was there. The whole experience was really nice.

Widow, another student who had had more than one semester of tutoring, said:

Sometime I get confused. Like my teacher would show me one way and the tutor would show me another way, and they would swear this way is so much better than that way. I mean, it was like, well, ‘I don’t know.’ And I’d end up doing both of the methods and just getting the whole problem wrong because -- I was so confused, you know. I guess it’s a older way of thinking about -- of learning it and a newer way that, you know, I mean they meant well. It’s always good, like even my teacher right now, he’ll show us one way and he’ll show us the other way, but I don’t know. Sometimes I think I’m better off learning it one way. Overall, I think it’s a good experience. You know, ah, it helped me see -- I think the biggest thing about tutoring was that first of all, I could learn how to do it kind of on my own level, you know. And another thing was that, um, you know, like especially, um, in some instances there was like people -- like I wasn’t the only one suffering. Because I always thought I’m the only one failing math. You know, it just makes you see that other people have the same problems and concerns that you do. So it makes you feel more a part of a group and, you know -- you know, I enjoyed it, except night tutoring. I would never do that again. I would never go to night tutoring unless I hired somebody maybe.

While many participants expressed a desire for one-on-one tutoring, Star shared the following comment:

I always knew that when I came to her I had my questions I wanted answered. And, of course, if everyone -- everyone else in the tutoring session -- whatever questions they had was also an added bonus, you know. And she -- I remember one thing she told me, that I just -- I was too hard on myself. She would tell me, ‘Just relax. Don’t stress. You gonna get it. You know, it’s gonna come to you.’ She told me -- all the time, You’re going to get it. Calm down.’ You know? Definitely, tutoring is just an asset, most definitely.

Overall, the participants expressed their comments in the affirmative with regard to their tutorial learning experiences. Most believed that tutoring complimented their academic quest and among the minority of participants who viewed tutoring with less
enthusiasm, there was still a sense of approval as they reflected on the concept of tutorial learning as a whole.

The terms represented in the table below reflect upon the students, as indicated in the emergent themes. The terms were thoughtfully chosen in an effort to reveal most accurately the types of students who chose to participate in tutorial learning. The themes, categories, and patterns can also be threaded to personality preferences. Personality preferences, as is reflective of the participants in this study, are a dominant factor in the decision making of students choosing to receive tutorial services as well as their perceptions of the service.

**Discussion of Themes: Categories**

Categories were discovered within each of the themes. A brief discussion is included here as a method of interpretation for the names that have been chosen to be representative of each. Although I did not actively observe participants in the tutorial setting, I did begin to feel that I was acting as a participant observer. Initially, it was not my intent nor did I consciously do observations of the participants. However, I did begin to have encounters with the participants soon after the first contact with participants was made. I do believe that the incidental role of participant observer was employed and became a factor in the development of these categories, in addition to the participant interviews and reflexive journal. I developed names for the categories as follows:

The “Odd-Beaters” and “Challenge Takers” were so named and used in the theme for choice. The choice to attend tutoring, as described in the profiles, was most often a result of need. Yet, these students displayed a will to beat the odds and take on the challenge of math. Distinguishing examples of those participants that I would consider
as “Odd-Beaters” were Talker and Queen. Talker, who vividly and in detail described his personal background, told me of his life-long disability and the odds that he felt he had always had in a society that typically, and as he said, “especially in his younger days” did not whole-heartily accept people with disabilities. Queen, who is a young African-American female, is also a young, single-parent who had a child toward the end of her high school years. Queen is a hard-working employee for at least two employers. Queen is fortunate to have a supportive family in the area, but does not rely on them to take care of her child. Queen has decided to beat the odds of being a young, single mother by entering the University in order to make her life and that of her child better. It is not easy to maintain two jobs, full-time status as a university student, and continue to give the time, attention, and love needed to a child.

By the same token, the “Challenge Takers”, are extremely interesting. “Mom”, just as Queen, has chosen to take on an extreme challenge. She is in the midst of a divorce, she has four children, all school age, and she has also decided that to have a better life she has to attend school. Queen moved to the area just for this purpose and has no family close by to help. Hope, Widow, and Skeptical also come to mind as “Challenge Takers”. Each has a special story to tell personally, in addition to a sincere challenge in the subject of math. Each has decided that somehow the math will be conquered because they have started a journey that they feel is absolutely necessary to complete.

The “User-Friendly” and “Friendly User” are categories related to the relationships formed with tutors. As described in their interviews, some participants, those who are “User-Friendly,” were pleased to have the services because their weakness
in math was such that any and all- available help is needed. The “Friendly-User”, on the other hand seemingly enjoy the collaborative learning and social structure provided by the tutoring environment.

Participants spoke about learning strategies in one of three ways: There were participants who indicated that they needed only minimal help, those who were “BYOS” (Brought Their Own Strategy), those who came with an extremely limited amount of math skill, the “Come and Get It” group, and finally, those who were somewhat knowledgeable, but knew they needed to gain more information and skill to survive the rigors of the math class, the group that I called, “Makers and Takers”.

In speaking about the derived benefits of tutoring, participants often referred to the following three things: they felt that the tutoring services were beneficial, but could be better, the “Give Me What I Want” group. Some seemed to dare not complain because the tutorial learning was like a lifeline. In some cases, this referred to simply a need for that extra bit of encouragement, but in others, there was a dire need for support and to some extent, a fear that even this was not enough, but “Every Little Bit Helps”. The last group, those who received, “More than Enough” were the participants who thoroughly enjoyed the company and the support.

Discussion of Themes: Patterns

The majority of the students, identified as “slow but steady”, were those who had struggled, but refused to give in to academic weaknesses or personal challenges. These students did not see time as a factor in the measurement of success; it was simply another challenge to it. Because of their desire to progress academically, they were aware of the need to put forth more time and were willing to take the time needed, even if overcoming
this one obstacle took longer than average as defined by the system. Other students, the “avid achievers”, were so coined to describe those who seemed to be keenly interested in achieving their academic goal. The keen interest is as much the focus as is the drive to succeed at anything they feel is worthy of accomplishment. Once these participants set their eyes on a prize, they seemingly begin to focus in on it until it is mastered. The significance of this trait is that it is not isolated to tutorial learning. Some participants talked about their quest to learn other things such as cross-stitch or computers, and reflected on times when a huge personal amount of effort was placed on learning something new or developing some special skill.

Both types, the “slow but steady” and “avid achievers”, chose to participate in tutoring just as they would have chosen to pursue any other activity or skill. It was just a part of their personality makeup to have this kind of desire and determination.

In accord with the theme of tutor relationships, the names given to the two distinct types of patterns were “self-insured” and “self-assured.” Those who were “self-insured” seemingly had a Relationship with Tutor that was formed on the basis of insurance. There was a need for security. The tutors became the safeguards, lifeguards, and intermediaries between the subject matter and the teacher. Fear of not gaining a passing grade initiated a relationship that in some cases never developed beyond the professional point of tutor and tutee. On the other hand, the “self-assured” participants usually formed a bond that did go beyond academics. The “self-assured” students were those who displayed an attitude of knowing, but needing to get feedback, assurance, and acknowledgement of their ability to perform. Regardless of the type of relationship, in both cases, there were those students who developed relationships that often bordered on
tutor friendships that developed as a result of tutorial learning. Again, a relationship could be drawn in terms of personality and learning styles.

The specified end product of tutorial learning is the building of learning strategies that engage the student so that he or she might be empowered. For the occurring patterns of the theme, learning strategies, I was compelled to utilize the terms “broker” and “buyer.”

The name “broker” was given to those students whose description of tutorial learning might be more aptly called a negotiation of learning. The “brokers” went to tutoring to get what they wanted and openly expressed opinions of how to best be served. They were their own best agents. The “buyers” were happy to have something offered and more willingly accepted the service received, even when the service did not fully meet their needs.

The evaluation of services, in accordance with the final theme, derived benefits presented itself in the form of the three final types or student patterns. There were students who were “pleasantly satisfied,” some who felt the tutoring was a “nothing lost, nothing gained” experience, and a few who experienced a “double negative.” The first two patterns were determined as the most dominant perceptions of tutorial learning. Also, these patterns speak for themselves. Participants revealed a sincere appreciation for tutoring or, at minimum, felt that it was supportive, but not as beneficial as expected.

A deviant voice was revealed as a third pattern by a minority of participants. This “Double Negative” group was aptly named as students revealed their disappointment with the lack of support from the teacher, the tutoring, the class as a whole, and the lack
of their own skill to master the subject. Table 2 describes the participant characteristics of the emergent themes.

**TABLE 2**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Categories</th>
<th>Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choices</td>
<td>Odd-Beaters</td>
<td>Slow, but Steady</td>
</tr>
<tr>
<td></td>
<td>Challenge Takers</td>
<td>Avid Achievers</td>
</tr>
<tr>
<td>Relationships</td>
<td>User-Friendly</td>
<td>Self-Insured</td>
</tr>
<tr>
<td>With Tutors</td>
<td>Friendly User</td>
<td>Self-Assured</td>
</tr>
<tr>
<td>Learning Strategies</td>
<td>BYOS (Bring Your Own Strategy)</td>
<td>Broker</td>
</tr>
<tr>
<td></td>
<td>Come and Get It</td>
<td>Buyer</td>
</tr>
<tr>
<td></td>
<td>Makers and Takers</td>
<td></td>
</tr>
<tr>
<td>Derived Benefits</td>
<td>Give Me What I Want</td>
<td>Pleasantly Satisfied</td>
</tr>
<tr>
<td></td>
<td>Every Little Bit Helps</td>
<td></td>
</tr>
<tr>
<td></td>
<td>More Than Enough</td>
<td>Nothing Lost, Nothing Gained</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Double Negative</td>
</tr>
</tbody>
</table>

**Data Analysis by MBTI Type**

The focus of my study was to explore the perceptions of students who had experienced tutorial learning and whether their tutorial learning experiences were related
to personality preferences. The second research question, “Are students’ perceptions of their tutorial learning experiences related to personality type preferences?”, was addressed by utilizing the Myers-Briggs Type Indicator, commonly called the MBTI. The MBTI assessment is an instrument that was developed for the purpose of identifying how preference patterns help to determine our unique personalities, motivations, and learning styles (Lawrence, 1979).

To briefly review, the types formed as a result of the MBTI assessment are derived from a combination of each of the dominant characteristics on four bi-polar scales. From the four scales, 16 types can be formed, which “are not evenly distributed” (Lawrence, 1979), and follow the patterns as described below:

**TABLE 3**

<table>
<thead>
<tr>
<th>TYPE BY PERCENTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion – 70% --------------------------Introversion – 30%</td>
</tr>
<tr>
<td>Sensing – 70% ------------------------------Intuition (N) – 30%</td>
</tr>
<tr>
<td>Thinking (female) – 40% -----------------------Feeling (female) – 60%</td>
</tr>
<tr>
<td>Thinking (male) – 60% ------------------------Feeling (male) – 40%</td>
</tr>
<tr>
<td>Judging – 50% ----------------------------------Perceiving – 50%</td>
</tr>
</tbody>
</table>

Overall, the dominant type preferences for the pool of participants in this study were identified as shown in the following table.
A discussion of the themes by type will follow.

**Perceptions of Tutorial Learning by Type**

**ISTJ**

**Choice To Attend Tutoring**

A general consensus in the ISTJ group was the lack of skill in math when asked to respond to the reason why they chose to attend tutorial learning sessions. In addition to this response, Change noted that she needed to have a quiet environment. She said,
“when I am at home, I have to put myself in another room, away from everyone, to do my homework because there are too many distractions.” In a similar statement, Mom is quoted as saying,

My oldest, who wasn’t living with me, came and moved back with me. So, it kind of made my plans readjust. I thought I’d continue my old routine, but it was quite difficult. I realized I was falling behind … so I decided to go and try the Tutoring Center.

As previously mentioned, Wisdom was a somewhat deviant voice because she viewed her choice to attend tutoring as a means of support and feedback. Wisdom responded by saying, “I got into tutoring because I had been out of school for 12 years. I had an “A” average, but I went to make sure that I had the understanding that I needed.”

Relationship With Tutor

In response to the theme, relationship with tutor, these participants made reference to particular tutors who seemed to fit their style of instruction and who gave them one-on-one instruction as the positive comments regarding tutorial learning. This group also offered contrasting opinions; however, if they did not believe they were getting the assistance they needed because of the Relationship with Tutor. For example, Wisdom stated that during her first attempt at tutoring she was not pleased with the tutor and reported this to the program coordinator:

She [the tutor] and I just couldn’t get along. I went in to learn and she was more about flirting. And I went to the director and told her. You see, I think it has a lot to do with it because if you can’t relate to your tutor, she’s doing something else or whatever, it’s not going to pay off.

Queen added, “Sometimes they helped, but most of the time – it depends on the person – like me being an older person, I really need help like one-on-one.”

Mom also offered an interesting comment by saying, “I think – really, just having so many people there, it limits your time [with the tutor], but she was patient. Yeah, overall it was positive.”
Learning Strategies

The learning strategies, particularly for this group, were a central issue. Each of the participants wanted structure, organization, and clarity of explanation first and foremost. Beyond that each one also talked about their ability to concentrate as an important factor in how well they studied. Again, Wisdom was the deviant voice by commenting:

“I have to study with noise. It’s unusual, but I have to have the TV or radio on. And I learn more by doing some study, going to do something completely different and coming back to study. I just can’t sit hours at a time.”

Each of the ISTJ participants also described their use of audio-visuals in their study methods during tutorial learning. Three of the five ISTJ’s actually stated that they preferred the math video and/or the math CD (software) more so than the tutor or teacher because of the clarity in explanation.

Derived Benefits of Tutoring

The derived benefits of tutoring were discussed in a number of ways by the ISTJ group. The benefits of tutoring, as seen by this group, were mixed; the ability to go into an environment that was quiet so that they could concentrate was an important aspect of what each wanted, but they did not always receive. Each one talked about the need to concentrate and focus in order to benefit from their study time.

Change said, “You learn to be more prepared – have the stuff you need with you. I don’t really know how successful it was. It helped a little when I would listen, not with them [tutors], but when I listened to the tapes.”
Mom also stated,

I guess it worked for me. I think it did because of my independence – being able to do the work at home and bring it in. I knew where I wanted the help, but people are constantly coming and going – there are a lot of distractions in there. I actually spoke up, maybe three times, and said, ‘excuse me, ya’ll are making too much noise.’ There were pros and cons.

Once again, the lone voice was that of Wisdom. She gave her overall impressions and stated that there were “Definitely” benefits. She continued, saying, “Due to the fact that if I hadn’t gotten into tutoring, I may not have been able to get through my tests the way that I did. Math is something you have to learn. Its just concepts.”

Queen did not respond positively to the tutoring as having been helpful, but she did add some positive aspects. Queen’s comments were as follows:

To me, they’re not helpful. Sometimes they are like when you need information or something quick – you know? But other than that, I found they weren’t very resourceful. It’s like the first week of school when we went over integers, I needed help that week and tutoring wasn’t opened until the following week and by the time we moved on I was already behind on the first section. I did borrow the CD. I found it was very helpful – more than the teacher because it explains and tells you why.

ISFJ

Choice To Attend Tutoring

Again, the ISFJ group of participants identified a skill deficiency in the subject of math as the main reason to attend tutoring sessions. Helpful probably put it best for all, saying; “I knew that I had to get help with math. I knew I wouldn’t be able to do it by myself.”

Relationship With Tutor

Each member of the ISFJ group expressed the interactions with their tutors in a most thoughtful manner. Each basically said the Relationship with Tutor was a positive part of their tutorial learning experience and each seemed pleased to have made the
contact in a personal way in addition to the idea of gaining the academic skill needed to succeed in the course. Unique had the most interesting comments for this group. She commented as follows:

I had three different tutors. My teacher was wonderful but it was not enough for me to pass. I had one tutor who was awesome. I had one who was so-so. And I had one who laughed and giggled the whole time. Its like I don’t know what – what’s so funny about algebra because she’d explain something and she’d laugh and it was just – I don’t know. That was very disappointing. I’m still getting tutored. I’m not saying that it was all the tutors. I had some great teachers too.

**Learning Strategies**

Helpful said,

It has helped me learn to focus and it enhanced how I figure out things. Like she taught one way to figure out things and taught me that I can figure out things on my own. I don’t always need help-you know. I realized that I needed to work the problems once and then work them again and read back through them before the test.

Quiet Storm added:

The tutor “took it step-by-step. I really felt that she showed me a lot.” Lady also felt that she gained some study skills by beginning to pay more attention to the details. She says, “I mean little signs that I would never put – Now I know I have to put a sign. That was a big thing because I was always forgetting my signs and you have points taken off for that, so you have to pay attention to detail.”

**Derived Benefits of Tutoring**

According to the ISFJ group, benefits were gaining the needed structure in order to do well in the course. Both Helpful and Quiet Storm were extremely pleased with their tutor and the relationship that formed during that time. Each felt that the tutor was personable and knowledgeable and this resulted in much praise of the person as well as the skill that was gained from the tutoring experience.

Helpful was excited to say that tutoring was, “very successful – the first test – I got a “D”, the second test I got an “F”, but this test I got, at the worst, its going to be a “C”. It’s probably a “B” or an “A”. So right there shows you its because I’m going to tutoring and getting help from them to show me how to do these fricking problems.
Quiet Storm concludes with the comment that “she and I really connected. She took her time and went step-by-step and made sure that we [tutees] knew it before she moved on.

INTJ

Only one participant, Slender, was type INTJ. She was not much of a talker at all; there was very little that Slender really expounded on, even after a bit of probing. Slender said that she came to the University because her sister, 18 months older, had come to the University. This semester the sister decided not to return, however.

Choice To Attend Tutoring

As for tutoring, Slender said, “I went because I was having problems in math. I can do it in the class, but I can’t really get it outside of class on my own.

Relationship With Tutor

Slender said, “I thought maybe if a younger person could help me or someone I’m familiar with I would do better.” As we continued the interview, it was apparent that the rapport that Slender looked for did not develop. Slender also told me that she was in a tutoring group of three. They all had the same math level, but were not in the same class. Slender went on to say that the tutor did try to give clear explanations, but “there were things she knew and things she didn’t. When she didn’t know, that’s what got me – because she would ask us – and I’m like, that’s what we’re here for – to get help.”

Learning Strategies

When I asked Slender about any learning strategies that might have been gained, she replied that there was nothing that was truly successful about tutoring. Slender said
she was just “watching the tutor” and after tutoring and class, she would attempt to try doing the homework on her own, but she says, “I can’t get it so that’s when I’d go there.” Slender continued, saying, “I mean, she said the same thing the teachers said. She showed us the same stuff the teachers showed us.” Her expression implied that this method was not satisfactory to Slender. Interestingly, because Slender has the preference for intuition (N), she made the following comment: “I get frustrated when you have to sit down and you just have to keep on reading something over and over again. That aggravates me.”

Derived Benefits of Tutoring

Repeatedly, the response from Slender was no and nothing. As Slender reflected, she did say:

But, I did learn. I learned how to study math. I could say that. But I found that out on my own, not from the tutor. If you work problems over and over again, - you know – the same type of problems, you will remember it. But I didn’t learn that from here, I learned that on my own – like doing the homework and stuff helps me out a lot.

As Slender concluded, she also said, “I was open-minded towards it and stuff. I was hoping she would help me a lot too. But if you can’t remember it on your own, you just can’t remember it.”

ISTP

Choice To Attend Tutoring

As noted, all participants responded to their main reason for attending tutorial learning sessions as their lack of skill in the subject and the desire to at least pass the class in order to progress. Skeptical, Apprehensive, Mannerable, and Tyler all made reference to having been out of school for some time and not having used any algebra for a long period of time as an additional reason for their need to have tutoring.
Stilt also added, “It helps me get a fuller knowledge of the course. I decided with my coach that it would be the best option because we were short on time also.” Stilt was referring to the fact that because of basketball practice and games, he had little study time left in his day after classes ended.

**Relationship With Tutor**

Comments shared by Tyler are indicative of her appreciation. She said:

I really enjoyed it. That we actually had help to go to – to get this help. It wasn’t like – you know – you had class and then you went back to class the next day – You had a place to go and they would explain stuff to you so you could go home that night and do homework. The atmosphere was really good – really friendly. The tutor I had was really good. And it was only two of us in that session – so we were on the same wavelength – you know. That made a difference too.

Stilt began his comments concerning the Relationship with Tutor by admitting that when he initially began tutoring, he had some concerns, but as the sessions progressed the concerns were alleviated. His responses follow:

One thing that I remember as being an unsuccessful time in tutoring was probably having a misunderstanding between myself and a tutor. Yeah – I don’t know, it probably was a lack of communication. I don’t know if it was a lack of communication or just a lack of understanding – I think more than anything on what I was having trouble with and what they thought I was having trouble with. So, I mean, that was a bit confusing, but basically it worked out. It was more earlier on in time. I mean when I first started here, fresh at everything and that sort of more or less sorted out now – but just at the start. Yeah, but I stuck it out and there was an understanding that developed between the two of us. I got an idea of what goes on in each session more or less. I was turning up more prepared for the sessions once I had an idea of what goes on. Yeah – once I had an idea that you can’t just show up and expect to learn.

Both Mannerable and Apprehensive agree that they had positive experiences with the tutors they encountered because the tutors were personable and easy to talk to about their math concerns.
Learning Strategies

With regard to learning strategies, Stilt identified several areas of improvement, particularly focus and approach. Stilt said:

“The tutoring helped me begin to break things down a lot further and – me personally – that sticks in my mind. I mean just not in math, but on every test.” He continued by also saying that his ability to follow a hunch developed a bit more as a result of tutoring: “I mean – yeah, if you have that hunch – You’re more likely to try and attempt that problem than if you don’t have any idea at all.”

Apprehensive agrees that she, “needed the step-by-step approach to gain some of the skill needed to do better in math and that’s what she did. It was like telling me how to work a problem step by step.”

Mannerable offered the following points:

I think tutoring helped me to focus better and give more attention to details. I think I spend too much time on certain things, but I think the reason why I do is because if I don’t I will fail. Some students can zoom through stuff but me, I like to take my time. You know, I take my time and try to go at my own pace.

Derived Benefits of Tutoring

Tyler spoke of the benefits of tutoring by saying,

It was reassuring. It was the atmosphere, more or less. You know, its like – you’re stuck – you can’t do your homework, but you try and still can’t get, then you go to tutoring, its like you finally got it. Now you can move on. It was really helpful and it made a difference like right before it was test time. We had a place to go. Like if we made an appointment, we could go to our tutor and she could help us the rest of the way and really get us through it.

Stilt probably gave one of the most telling comments about the benefits of tutoring. He said, “It just helped to be able to start fitting all the pieces I guess.”
Choice To Attend Tutoring

Three of the participants, Reluctant, Dreamer, and Talker, were typed as ISFP. Their comments regarding the tutoring follow:

Like just about every participant response in regard to tutoring, those in the ISFP group acknowledged their lack of skill. However, Reluctant specified the “first test” as a reason she attended tutoring. She went on to say, “I felt I just needed that extra help. Like the backup more than just the class because the teacher just wasn’t explaining enough for what I needed.”

Relationship With Tutor

As previously noted, it was Dreamer who developed a sincere friendship with her tutor. It was important to each of these participants to feel comfortable in the tutoring relationship. Dreamer recalled the fun she had in sessions with her tutor. She talked about two other people who came as well, but who eventually dropped. Each one talked about the preference for a one-on-one tutoring session, but having felt comfortable with a small group.

Learning Strategies

Each of these participants identified with the sensing preference by stating their need for structure and the belief that receiving clear explanations with step-by-step directions for the process was one of the most important strategies gained in tutoring.

Reluctant’s comments are very interesting in light of her type:

I keep telling myself, Oh, I’m gonna do it. You just never get around to it though. I keep putting it off. I would go in there [tutoring] and get all of my homework done before I’d go home. It was like a structure – that I had to do – not had to, but it was – because once you get home you have everything else to do.
Talker said:

She’s [the tutor] very good. There were some things I could learn from her. But, I also worked with the audio-visual library. I went there and watched all those films and all. I was learning more from the films and from tutoring than from the teacher. And what ended up happening as I’ve gone through tutoring is that I have found that I have to learn a different way from what she [the teacher] was teaching for me to be able to understand it. The tapes just explained it so well. And I guess it is the tutor. She would write it on the board, and start doing it and we would watch her. But what she was doing eventually was she’d take all these shortcuts and for the large part, these shortcuts are good because they’re less confusing.

Derived Benefits of Tutoring

Reluctant had mixed responses to the benefits of tutoring. She said,

That particular semester, last semester, it did work. I did have a good experience. Just to have the backup for when we get further into stuff that I need more explaining, but this semester, I’m not sure. Maybe it’s the person, but maybe it’s the situation.

Talker responded to the question of benefits by saying, “Yes, it was positive for me because with tutoring I understood.”

Dreamer stated, “I felt all of my sessions were great because I learned what I wouldn’t get in class. It made me do in asking for help in my other classes.”

INTP

There was only one INTP, City boy. All of his perceptions of the tutoring experience were favorable. Probably, most telling in relationship to his type preferences were his comments about the learning strategies specifically. City boy’s comments are as follows:

Choice to Attend Tutoring

City boy reflected on his high school background in responding to this question. He shared the following comments:
I don’t know if you remember anything about high school, but they sure didn’t prepare us for college as much as they should, first of all. I knew I would need some help just because my math in high school wasn’t that great. I always struggled in math in high school. So, I knew being out of school for three years and not really using anything but a regular calculator – I knew I would need help.

**Relationship With Tutor**

They [the tutors] to me, look at you and start asking certain questions, doing the process and by just getting to know you a little bit, they know how to – you know – bend the explanations. So, the one-on-one with the person – you can kind of turn it around a little bit. And they work with you until you understand. I guess…from what I’ve seen, the tutors that are in there, you can tell they …really want to help you…Because they want to help you so much, you want to help yourself and it goes back and forth like that. And you’re excited to go see your tutor….

**Learning Strategies**

I learned the importance of going through the steps. When I went to tutoring we went through the steps and I actually grasped the information. I just signed up for English tutoring last week and I got there and she really explained the essay process to me – at least the one I was working on – so totally different, she just helped me break it down, explained it to me, and something kind of clicked.

**Derived Benefits of Tutoring**

City boy identified his inability to concentrate and be committed, but with tutoring, that was not as big of an issue because he wanted to go to the sessions.

City boy shared the following:

So that way, I knew that I would have an hour on Monday and an hour on Wednesday to concentrate on that math or that English. That was extremely important to me because I know ‘I’m good to go’ because I have set aside that time. I need that or otherwise I just sit at home and watch TV. I like to use my creativity and I’m always thinking about other things and that’s maybe a downfall in some ways, but I think I’m doing a good thing. I’m always looking at shapes and curves and seeing how – how I can create something. But with the tutoring, because its usually in a small room – and because the teacher is going to be focused on me, I’m going to be focused on her. I’m going to look her in the eye the whole time and give her my 100% because she is there giving me hers.
ESTP

Another group with only one person in that type preference category was that of ESTP. Cutie was the lone, but very interesting, person who had this preference type.

Choice to Attend Tutoring

Cutie recognized his own weaknesses in the area of math, but gave an account of his first day in his first college level math class that was one that I’m sure he will never forget. A portion of the story follows:

My first semester was my first time I had math in like eight, nine years. And when I first walked in …my first day of class…I thought well maybe if I take tutoring it would help me out and it did.

Relationship With Tutor

Cutie really needed the support of the tutor for two reasons, as addressed above. He responded to the relationship issue as follows:

It was more of – like- one-on-one and I think it is – you have a better chance to learn something. It was more like you had more people, but you can be more of a one-on-one basis if you needed to talk and ask her a question – she was there. And if you needed extra time she was there to talk to you more. Even after the tutoring was over and – yeah, she did a real good job.

Learning Strategies

Cutie addressed the learning strategies gained by sharing the following comments:

It did kind of help me with math by knowing that you have to keep up with your math like everyday instead of sitting it aside for one day and think you are gonna come back and catch up because you learn something everyday. And they said the best way to do it is to go home everyday and just do problems. And that’s – it really did help me out.

Cutie also talked about learning to be more organized and getting a grip on the process. Like she can show you something she might know and it might be a little different but it’s the same way – but you know she can say – well you can also do it this way if you need to.
Derived Benefits of Tutoring

The most significant benefit of tutoring to Cutie was the availability of the service itself. The bonus was that he also found a caring tutor who was also knowledgeable and able and willing to share the information. Cutie expounded on his increased skill level in particular by sharing the following:

“I found out that I really enjoyed it [math]. I can come home and I can be thinking about math all day.”

ESFP

Choice To Attend Tutoring

Each of the ESFP participants was extremely people oriented. They all openly spoke to me about themselves and their tutoring experiences. These participants basically had the same response, lack of skill and awareness of their need as the reason they chose to attend tutorial learning sessions.

Relationship With Tutor

The responses of the ESFP group were evidence that they felt the relationship formed with the tutor was a very important part of their tutorial experiences as well as personal ones. This group was obviously feeling types. They talked about people with warmth and wanted to have that same feeling from others in return.

Learning Strategies

Interestingly, each participant in the group, except for Sweet, talked about their organization skills, their desire to have structure and they felt that tutoring provided that for them. Sweet had the following comments:
I can’t stay quiet. I can’t master theories. I have to have some noise. I mean, it’s hard – Like I can remember facts easy. But I have a tough time mastering theories. That’s why I probably like Culinary Arts – Its hands-on. She does say the tutoring “helped me organize how I was doing the problems. It helped me focus.

Derived Benefits of Tutoring

Very much in accord with type preferences and the responses received, when asked about the derived benefits, Early Bird identified working with others by saying, “We were like my problem isn’t your problem, but we knew what was going on and we helped each other out.” Sweet added, “The tutoring helped me out in terms of formulas, and techniques, and steps, and stuff. It just gives me more confidence.”

With knowledge of the MBTI, I began to see the contrast of Sweet with the others in the group as possibly not having fully developed her type preferences, particularly the sensing characteristic or the perceiving characteristic in such a way as to use them to her full advantage. It would be quite interesting to see her and talk to her a bit later in life.

**ENFP**

For me, one of the most interesting participants in this study stood alone in terms of type. Homegirl, the lone ENFP, provided the following statements with regard to the themes of the study:

**Choice To Attend Tutoring**

Homegirl gave the unforgettable response: “Desperation, salvation” as her reason to attend tutoring. Of course she added, “Just because I needed all the help. I just needed all the help that I could you know. I knew it was going to be a struggle.”
Relationship With Tutor

It really wasn’t one on one, but it was like when I went, there was only one other student who was trying really hard. He [the tutor] was very patient. He didn’t make you feel like – I don’t want to ask a stupid question you know.

Learning Strategies

Homegirl was pleased with both the tutor and the computer software, but said:

I keep everything in a little folder. All tests, worksheets, answer sheets, and then I have my notebooks, file notebooks to all my work. I’m not saying tutoring is my last resort. It’s my support group. They’ll show you how to find the problems, take it to where you have an understanding and I study the little lines in between.”

Derived Benefits of Tutoring

The following comments do an excellent job of summarizing what Homegirl said about the benefits of tutorial learning: “It helps to increase your confidence and you knowing that you can do it. It’s not beyond your understanding.”

ESTJ

As I identified the three ESTJ participants, it was as if the MBTI patterns were crystal clear. The participants, Rewind, Chief Cook, and Go-Getter, were together in this type cluster. Each one brings images of a person who is seeking the “fast-track”, only each one is doing it as a second time around reward for prior life service.

Choice To Attend Tutoring

The typical responses came from these three participants for choice. One, Chief Cook added that it had been 14 plus years that he had been out of school and the diagnostic placement tests placed him in remedial English and math. Go-Getter also expressed, in addition to simply having a need for assistance, himself as follows:
“I wasn’t gaining enough ground quick enough. Tests were coming quickly, but my knowledge wasn’t moving as quickly.”

Relationship With Tutor

Chief Cook had a chuckle when he said, “My tutor gave me the impression she didn’t really understand what I was trying to tell her (laughing). She was good.” Chief Cook gave me the impression that there was more to be said, but he would not.

As indicated in the profiles, Rewind intentionally made a connection with a particular person in the lab. Using her observation skills, she made mental notes of tutors and the times they were present then set out to connect with the one she saw as best.

Go-Getter used this same method of operation. He sought out the best situation that he could for himself. Go-Getter started his own study group in addition to seeking the help of a couple of tutors in his attempt to move forward. All three participants analyzed their situation, using the sensing and thinking preferences, and then proceeded to take on the task.

Learning Strategies

Chief Cook expounded on learning strategies to some extent, saying,

I am a visual person, and currently my math class is only on the computer. It is not a lecture-based class. I sometimes get concepts quicker than other people; that is an advantage in this class. Once you understand the concept, you can go on. You don’t have to wait for the people who are taking a little bit longer. But the downside of it is you don’t see, when you don’t understand the concept very well. You don’t see the process enough to get it and that is kind of what I need in my personal learning – is to see the process to be able to understand the concept. In other words, show me the steps and I can learn the steps and once I learn the steps, I got it.

Although, not in such depth, Rewind and Go-Getter also echoed the need to learn the steps in order to feel comfortable. Both did identify the process of tutoring with being able to learn the steps and this is what they were given.
Derived Benefits of Tutoring

The tutorial benefit identified by Go-Getter was “I’m finding a lot of benefit in just adapting. I mean the only thing I can do is adapt – adapt my learning style – and I do feel comfortable in doing that.

ESFJ

Parallels were strongly felt in the three ESFJ participants. Each was a non-traditional student, each talked about personal feelings and relationships easily, and each one had some issues with tutorial learning, but also expressed an appreciation, at least in some way. Particularly, Widow and Cherokee had both positive and negative comments, but basically, the most positive comment about tutoring given by Hope was the provision of audio-visuals that she was able to utilize.

Choice To Attend Tutoring

Skill in math was again the number one reason to attend tutoring for this group as well. There were added comments, such as Widow’s comment concerning the untimely death of her husband, which pushed her into college, and eventually, tutoring in order to survive the class.

Relationship With Tutor

Each participant spoke about the one-on-one relationship with a tutor that they desired. Generally speaking, Widow and Cherokee expressed positive outcomes in terms of tutorial relationships. Having an alternate viewpoint, however, Hope said, “I don’t care for the tutoring department.” One reason for this, as Hope continued, did stem from Hopes feeling that no interaction occurred. She stated further, “You can’t have any sort
of relationship with any of them. They don’t stand there long enough. They’re not approachable.

Learning Strategies

Again, Hope said, “They haven’t used any. The only strategy, if I had to sit here and say one, I would go right back to the videotapes. They should just have those lined up in the hall. I mean – you know – where you could just go and sit in the hall and watch a video and leave.” Widow and Cherokee indicated that they were pleased with the structure and they learned to be a bit more organized which helped with their math learning strategy.

Derived Benefits of Tutoring

Widow said the “tutoring really helped me with taking a test because I knew when I’d sit down for the test, I would panic. I learned how not to be afraid to take a test and I find that helps a lot too.

Cherokee, like Hope, did not respond positively, about the benefits of math tutoring, saying, “I just dropped it completely.” She went on to describe an extremely opposite feeling about English, however.

ENFJ

One participant was an ENFJ, Model. Model described her experience with frustration and joy. She said that she had experienced both. Her preference would have been one-on-one tutoring, but she sincerely expressed the joy she found with group tutoring. Model also felt that the entire experience was helpful. In her final analysis, Model said she learned that you have to be dedicated.
Choice to Attend Tutoring

The following comment provided some additional insight to the reason that Model gave for attending tutorial learning:

“I attempted 003 computer math and was totally lost. We were about to take our first test and I just wasn’t getting it. I had no foundation.”

Relationship With Tutor

Model had a mixed reaction to tutoring in terms of the Relationship with Tutor. Her dissatisfaction stemmed from what she described as a staffing problem.

“I sat there for like 15, 20 minutes and she never acknowledged me, but she was helping another student. I was frustrated. That was one of my first experiences. My last was better. I went there often, and that was fun. It was a group of maybe four of us.”

Learning Strategies

Model offered a very interesting comment about learning strategy when she made the following statement:

“Maybe the main strategy that I learned was to get enough information about what you are doing so you can get help.”

Derived Benefit of Tutoring

Model talked about an overall feeling that tutoring was beneficial. She indicated that although she had negative experiences she felt that you just have to keep working at it. She said, “I don’t think there was really any particular time, it was all helpful. The more I got comfortable with the math, the more questions I asked. You have to prepare for tutoring so that you can get what you need.”
Discussion

The Myers-Briggs Personality Type Assessment was used as an instrument to identify the differences that exist in the personality types of tutorial learning students. The most striking similarity in the participants was in their choice to attend tutoring. The awareness of their skill level compared to the desired level of skill needed to progress in math was the reason they chose to attend tutoring. Basically, this response was given throughout, regardless of type or other factors. The remaining three themes: relationship with tutor, learning strategies, and derived benefits of tutoring, generated mixed responses with minor differences in relationship to type preferences.

Of the 32 participants, the dominant preferences, in accord with the four bi-polar scales, were Introvert (I), Sensing (S), and Judging (J). There were an equal number of participants who were typed as Thinking (T) and Feeling (F). Although, the participants had similar responses, some were very interesting when viewed from the perspective of type. Also interesting was the type factor when viewed in the sense of an overall portrait of the participants. There were characteristics that threaded the preferences with particular patterns or styles of learning that related to the stories of participants in the study.

In comparing responses according to the first scale, extraversion (E) and introversion (I), there were more participants who used the introverted characteristic as their dominant preference. Because extraversion brings to mind the people-oriented characteristic and, according to type theory, the extravert “enjoys the outer world of people and things” (Lawrence, 1979) it did not seem to fit the pattern of an introvert to seek tutoring. However, the most desired request from the participants, individual, one-
on-one tutoring possibly gives some validity to the reasoning that introverts choose to communicate in small group type settings rather than more open, large, classroom type settings.

On the sensing (S) and intuitive (N) scale, there were many more participants, 28, who had the sensing type compared to intuitive type preference. According to the MBTI, the sensing and intuitive preferences relate to how students take in information, or prefer to learn. Because tutorial learning gives students a method of instruction that is structured, this did seem to be in line with preference type information. From a different perspective, the intuitive (N) preference type students, who generally did not choose to participate, have an ability to grasp concepts, meanings, and relationships in learning information. Knowledge of this information may be a factor in why these students did not participate in tutorial learning.

The thinking (T) and feeling (F) scale determines the process used when a decision is made. The assessment information describing the MBTI, describes this scale as having consideration for “rational processes because they both use reasoning to arrive at conclusions or decisions” (Lawrence, 1979). As noted, these type preferences were equal in the study of tutorial participants. The responses of participants in terms of relationships with the tutor may have been one of the most telling indicators of positive or negative overall impressions with regard to tutoring. The feeling types generally felt good about their relationships and wanted to have more personal contact in addition to receiving the necessary skill development. Learning strategies was also a dominant theme, however. The thinking and feeling characteristic was also prevalent in this area
with regard to participants who indicated the structure that was provided by tutoring was something that they appreciated and something that the feeling types learned.

The judging (J) types prefer to process information, make a decision, and quickly have closure, usually done with minimal information. The perceiving (P) type, on the other hand, is usually more prone to have a sense of curiosity that leads to the desire to understand how and why things occur with little need to have closure. Interestingly, there were more judging type rather than perceptive type participants in the study.

**Theme Differences**

**Choice to Attend Tutoring**

It was abundantly clear that regardless of type, participants were aware of their need to improve math skills. Whether the background from high school or a long and noted past of not liking math, it was a lack of skill that rested at the core of why participants decided to choose math tutoring. The type differences did provide some interesting insight as to the reasons that got beyond the surface answer, however. When viewed from this perspective, two preferences stand out: The intuitive (N) preference as well as the perceptive (P) preference found in some participants also led to comments that related to the activity patterns according to the MBTI. For example, City boy talked about his natural ability to be creative and thus, unable to focus; the tutoring, however, gave him the focus he needed and this was one of the reasons and benefits that he found from tutoring.

**Relationship With Tutor**

The theme, relationship with tutor, is evidence that tutorial learning services may play an important role for students with the dominant preferences of I, S, and J as has
been identified in this study. In accord with these preference types, tutorial learning allows for the need to receive details and step-by-step direction when given instruction. Also, according to the MBTI, the preferred activity pattern of a dominant sensing (S) type is to have an established social structure. Hence, tutoring does give evidence of the academic and social development of students.

Learning Strategies

The participants in this study discussed learning strategies that they felt were either enhanced or gained from tutoring that also relates to patterns according to the MBTI preference types. The thinking type preferences referred to their desire to get what they needed in order to do the required math homework or begin to understand the process better. Participants with thinking as their dominant preference often focused on their concern for mastery as indicated by the MBTI assessment. The last bi-polar scale, judging and perceiving, also gave indication of tutoring as a service that provided structure for students. Often, particularly, for a first-year student, structure and discipline are important retention factors. Many students who are not successful have simply not been able to develop those necessary skills. Tutoring provides such an environment.

Derived Benefits of Tutoring

The derived benefits of tutoring can be seen in a discussion of each of the first three themes. Tutorial learning is an avenue for students to participate in a learning environment that is established, provides structure, the opportunity for social interaction and communication with others, and most importantly, the mastery of a subject.
Regardless of type preferences, students who are dedicated and determined to get a degree must be engaged in learning and often must learn how to engage. One service that can significantly impact learning at the college level is campus-based tutoring.

**Summary**

This chapter included a presentation of findings that were drawn from the data analysis as previously discussed. Profiles were developed to allow readers a characterization of the research participants who chose to take part in this study. The data analysis procedures were discussed and the emergence of themes was illustrated in narrative as well as visual displays. Finally, the conclusions and verification process was presented to affirm the given results.
CHAPTER 5

DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

This chapter begins with a restatement of the purpose of this study and a review of the methodology and results. Next, a presentation of the results and their relationship to the research questions is provided. Recommendations are provided for higher education professionals who administer academic support programs as well as for college level administrators in general. Suggestions for future research are included.

Purpose of the Study

The purpose of this study was to explore students’ perceptions of their tutorial learning experiences and to determine whether their perceptions were related to personality preferences. To satisfy this purpose, students who participated in a campus based tutorial program were sought to answer several questions pertaining to their tutorial learning experience. The protocol that was utilized during the in-depth interviews is provided in the appendix of this study.

Summary of Procedures

In-depth individual interviews were conducted with students who voluntarily participated in tutorial learning. These students agreed to tell their story to illuminate their own perceptions of why they chose to participate in tutoring and what their perceptions were of the tutorial learning process. The interviews were audio taped and later transcribed. Data analysis procedures were then applied and resulted in the identification of four themes: (1) Choice to Attend Tutoring; (2) Relationship With Tutor; (3) Learning Strategies; (4) Derived Benefits of Tutoring. Coding of the interviews led to the development of the categories yielded from within each theme, and
data displays were utilized for the examination and description of the revealed information. To further facilitate the development of findings, document analysis, peer debriefing, and reflexive journaling were used. A summary of the results is included.

**Summary of Themes**

The tutees who chose to participate in this study shared their perceptions of the tutorial learning experience. In doing so, themes emerged in the areas of choice to attend tutoring, relationship with tutors, learning strategies, and derived benefits of tutoring. A discussion of these four themes follows.

**Choice to Attend Tutoring**

The participating tutees revealed their reasons to attend tutorial learning as an acknowledgement of needed skill development in the area of math and the desire to receive personal feedback as they attempted to meet the challenge that was placed before them. The non-traditional students voiced the need to fill in gaps caused by deficiencies in their academic background and loss of math use over time. For example, Slender – INTJ, was one of the participants who recognized the need to develop her math skills, commented, “I went because I was having problems in math. I can do it in class, but I can’t really get it outside of class on my own.”

The desire for feedback also resulted from what was perceived as a lack of interaction with the classroom instructor. The participants used expressions such as, “She was an excellent teacher, but she just taught -- you know, went right on to the next lesson without asking if we needed additional help. She just zoomed right through classes.” Therefore, the students chose to attend tutoring in an effort to seek positive interaction
and to counteract the minimal feedback or lack of clarity from communication received in class.

Quiet Storm – ISFJ, referred to the time away from school and her lack of math use by saying, I decided to go back to school after I had been out for ages. And it was kind of hard at first – being out of school that long. I kind of wish I would have come here straight after high school. While it’s still fresh...And if you’re not focused on it, it’s kind of hard to get back into it.

In addition to their lack of academic preparation, some students also expressed their difficulty in seeing the need for math in their intended future employment. Sweet – ESFP, explained her choice to attend tutoring with the following:

Because I needed help and that was the only way I could get it. It was just easier for me to attend. Well, math is a hard subject for me. I’ve never understood. Some of it, I can understand. But, some of it, I think it’s pointless for what I think I’m in college for. I don’t think I’ll really use all of it. But, it’s just something – you know – I’ve gotta do. So, I’m trying to make the best of it.

Thus, the participants described their choice to attend tutoring by discussing personal areas of concern. The participants generally indicated that their obvious reason to receive tutoring in math was to aid their success in class. Yet, participants spoke about individual needs and the reasons that they felt tutorial learning would give them the needed support to improve their skills in math.

Relationship with Tutor

Once the decision was made to receive tutoring, the relationships with the tutor became a salient factor in their perceptions of the service. Students identified their relationships with tutors to be a significant factor in their quest to successfully build their math skills through the tutoring process. The development of rapport created an
environment for open communication that enabled the students to ask for needed support and to develop a bond with another individual on campus. Stilt-ISTP, an international student who had just entered the University, described the beginning of his tutoring sessions as difficult, saying, “I don’t know if it was lack of communication – just lack of understanding.” However, Stilt continued his thoughts by saying, “I stuck to it and it sorted itself out and there was an understanding that was developed between the two of us.”

Helpful–ISFJ, noted the significance of the relationship as well, commenting that the interactions with his tutor were positive. Helpful stated the following:

She’s real, real – really nice. She’s probably one of the better tutors in there. She’s really good and she’s a real good person. She knows – she can relate to me easily. She knows what I’m talking about. Sometimes you might ask the teacher a question and they don’t know what you’re talking about.

A by-product of the tutorial relationship was the rise in confidence received when the student began to grasp the math concepts. The reflections of one participant give expression to most by saying, “I found out that I really enjoy it [math]. Now, even with math, I can come home and I can be thinking about math all day. Like I just get one problem that is stuck in my head and I’ll just think about it until I figure it out.” It was also evident that the relationship with the tutor was based upon the availability of one-on-one, or small group tutoring. The overwhelming majority of students preferred one-on-one tutoring as opposed to small group. However, students did state the benefits of a smaller group tutorial as opposed to the classroom setting. The comments of one participant make reference to both the desire for a one-on-one setting, but the acceptance of a small group.
I’m not necessarily the type to sit down and ask questions in the class. If I make a note of it, I think that leads me to tutoring because these are the questions I wanted to ask in class, but I’d ask in the tutoring session. It’s a little bit more one-on-one. It’s a little more comfortable…and [you can be] a little bit more sure of yourself.

As students’ confidence built, so did their ability to perform at a higher level. The relationship with the tutor, therefore, was significant in a number of ways. Because tutees developed comfort in their tutoring relationships, communication was enhanced that allowed for skill development and personal development. Ultimately, the relationship with the tutor also impacted the students’ perceptions of the tutorial learning services.

**Learning Strategies**

So that tutees might be able to increase their odds of success in math, the implementation of learning strategies was a necessary skill for them to learn in tutoring sessions. Students identified learning strategies gained as a result of tutorial learning. Participants were asked to respond to whether or not suggested learning strategies were received or enhanced during their tutorial sessions. During the interviews, participants were prompted to respond to whether particular-learning strategies had been gained. The strategies included the following: the ability to have better use of organization skills, the ability to focus, the ability to put things in logical order, the ability to give more attention to details, the ability to have better use of time management, and the ability to be more comfortable with following a hunch.

As expected, the responses varied, but most students responded in the affirmative to gaining better organizational skills, the ability to better focus, the ability to put things in logical order, and the ability to give more attention to details. Not as many participants felt that they were better at time management or the ability to follow a hunch.
Yet, the fact that they chose to attend tutoring was an indirect indication of time management at work. The students did identify more confidence in test taking as a result of tutoring. Some also referred to time management in terms of test taking, saying that they became more aware of how to do problems they were sure of first and then go back to more difficult test items.

Consequently, the participants were aware of particular learning strategies that can assist students in becoming more successful, particularly in math. As they responded to these suggestions it was also apparent that students perceived some learning strategies to be more important to their success in math than others. The learning strategies that the participants repeatedly indicated as having gained from tutoring were the ability to put things in logical order and to give more attention to details.

Participants indicated to me the importance of the above two items because, according to them, working math problems required them to be able to work in a step-by-step process. The MBTI identifies the preferences for logic and details as consistent with people who have the preference types of thinking and sensing. Accordingly, the thinking and sensing preference types corresponded with the preference types of the majority of participants in this study.

**Derived Benefits of Tutoring**

According to participants, the emerged derived benefits from tutoring were in the areas of improved grades, comprehension, and confidence. One participant stated, “Definitely, it impacted my success, due to the fact that if I hadn’t gotten into tutoring, I may not have been able to get through my tests the way that I did. Math is something you have to learn; it’s just concepts.” As anticipated, the most obvious benefit for the
tutees was improved grades. One of the adult learners shared the following story. One afternoon, in a reversal of roles, she described going to meet her children at the bus stop waving her “A” paper for them to see because she was so excited to have passed her math test with such a high grade. Of the 32 participants interviewed, 14 specifically indicated that they had grade improvements in math as a result of tutoring.

Increased comprehension of the subject was another benefit revealed in the stories of participants. Once in tutoring, participants began to identify with the process of math, the steps involved in successfully completing problems, and the various methods involved in problem solving. A number of participants commented on the ability of the tutor to clearly explain the process and then work through the problem in a different way. Participants usually felt that looking at the problem and working it by using different methods aided them in their understanding of the problem and, in some respect, math in general.

A third benefit from tutorial learning was the gained confidence of participants. The inflection of participants’ voices when relating their triumphs or trials was evidence that confidence had been gained. One participant specifically identified this as he shared the following:

I think it’s [tutoring] going to allow me to make a better grade on the test than what I would have made without the tutoring. The right impact would be for me to improve my grades on the tests. Before I was thinking I would make a “C” on this test, but I’m thinking an “A” or a “B” now.

The participants’ perceptions of their tutoring experiences were positive. Although participants identified areas of weakness in the tutorial learning program, generally, the students indicated overall support of the program. The derived benefits
that are indicated above were described in some aspects of the program, if not all, by each of the participants in the study except for one.

**Summary of Personality Preference Characteristics**

Students with both the extraverted (E) and introverted (I) preference indicated a desire for one-on-one tutoring. However, realizing that individualized tutoring was not really an option, participants generally agreed that there was comfort in a small group tutorial setting for asking questions and receiving clarification of information.

Because the MBTI addresses ways of taking in information through the sensing (S) or through the intuitive (N) preference, it seems fitting to address this scale as it related to the learning strategies discussed by participants. Most participants identified their appreciation for skill building. Most apparent was that participants began to recognize the need for practice and consistent attention to the subject as the door to building math skills. The majority of the participants used the sensing characteristic as their preferred type preference. The strength in this preference is the ability to be observant, aware of details, and to want a more hands-on approach in learning.

The thinking and feeling (T) or (F) scale relates to making decisions or use of information once received. The thinking preference uses logic or analysis while the feeling preference uses values or concern for others in making decisions. The knowledge of this scale might be useful in a number of ways, but in terms of learning strategies, tutees using the thinking preference were clearly aware of what they perceived as the benefits or lack of benefits, in tutorial learning and they usually described specifically learned skills as their evidence. Whereas the feeling types also were crystal clear about their perceptions of benefits of tutoring, they typically based this decision on the
relationship or the lack of a positive relationship being formed with the tutor. Yet, all participants wanted to have tutors who were willing to give of themselves. Across types, the participants desired tutors who had an appreciation for them as persons and were able to communicate on a more personable level. Beyond the style of communication, participants most desired tutors who were knowledgeable and able to express their knowledge to them.

Regardless of the judgment (J) or perceptive (P) preferences, students received a better awareness of the need for structure and organization once the tutorial became a part of their study routine. The students with the judgment preference felt that tutoring enhanced their natural preference for structure in their learning and study time. Those with the perceptive preference learned that the structure provided by tutoring served as an effective tool for becoming a more successful math student.

The personality preference profiles of the MBTI were synonymous with the perceptions of experiences as relayed to me from the interviews with the students. The MBTI did show evidence of its usefulness as an instrument in the development of tutorial learning programs. The personality preferences of students, as indicated by the MBTI assessment, can help to build the necessary rapport for learning as well as the necessary skills.

**Themes and MBTI Relationship**

When this research was initiated, it was the intent to address the tutorial learning experience from the tutees’ perspective to determine if a relationship existed between their perceptions of tutoring experiences and their MBTI personality preferences. The result of this exploratory study demonstrated that students’ personality preferences are
related to their perceptions of tutorial learning. Based on themes that emerged from in-depth individual interviews with tutorial learning participants, data analysis, and verification of findings, a theory of the tutorial learning process was developed.

Tutorial learning participants provided in-depth descriptions of their experiences with and their responses to tutorial learning. Responses of the participants identified a plausible process theory. In general, participants’ perceptions regarding the four themes, choice to attend tutoring, relationships with tutor, learning strategies, and derived benefits, correlated with their MBTI personality type preferences.

For example, for choice to attend tutoring because of a lack of skill or the need for feedback, the participants’ extraverted or introverted attitudes were instrumental in their decision to attend tutoring. The majority of the participants in this study were identified as introverts. As previously mentioned in this study, introverts desire communication in one-on-one situations and, secondarily, in small group settings. Throughout the interview process, the desire for one-on-one tutoring was expressed.

Once in tutoring, the relationship with the tutor was a development that impacted the perceptions of tutees. As tutees reflected on their perceived relationships, each of the preference characteristics was revealed in accord with type preferences of the student. The development of the relationship stemmed from the perceptions of the tutees regarding the level of communication and support they felt was received.

Participants expressed the development of rapport with the tutor affected the perceptions of the tutorial experience. The sensing-feeling preference types enjoyed the development of a true bond with the tutor. The thinking-judging preference types were more comfortable with less personable relationships with the tutor. The tutees’ need for
tutorial assistance was supported by both the development of learning strategies and the perceived attention that was given to the participant as an individual.

The preferences of extraversion/introversion, and judging/perceiving, were evident as participants recalled the joy or disappointment of talking with the tutor and/or members of the tutoring group. Also, tutees talked about improvements in learning that related to the judgment preference when sharing their sense of self-discipline that either led them to tutoring or that they gained from the tutoring experience.

The learning strategies received from tutoring also reflected MBTI preference types. The sensing/intuition and thinking/feeling preferences were most apparent as tutees discussed their perceptions of support received from tutoring. Support was given, according to participants, when tutors took the time to share both academic and personal information. When tutees described support in terms of academics, the sensing function came to the forefront. Tutees, using the sensing preference, described how they learned strategies for developing the needed step-by-step process to working problems or learning to pay attention to details. The tutees’ perceptions of support, in personal terms, were based on the thinking and feeling preferences. The tutees with dominant thinking preferences typically acknowledged the areas of skill development that were actually gained in tutoring. The tutees with dominant feeling preferences discussed support gained from the value they placed on the tutoring relationship.

The tutorial learning experiences of participants traditionally are thought to be an avenue of academic support to teach students the necessary strategies to improve students’ grades and to help them become independent learners. As participants conveyed their perceptions of learned strategies and the benefits derived from tutorial
learning, I began to see the use of a formal assessment, particularly the MBTI, as a tool to enhance the effectiveness of a university tutorial program. By knowing type, once a student chooses to attend tutoring, tutors and tutees may be matched accordingly, which ultimately impacts the relationship, the strategies employed, and the perceived benefits of services.

Tutees reported derived benefits that were both tangible and intangible. The tangible strategies are those that refer to the application of information. The intangible strategies are those that refer to the acknowledgement of behavioral strategies such as self-discipline, time management, and the ability to focus, which are important elements of academic success. Those students with the sensing preference, the majority in the study (n=28), were appreciative of receiving tutorial assistance in practical and detailed methods that they could apply in math to be more successful on their test performance in addition to improving their comprehension and confidence. The expression of their appreciation was reflected in the comments and values shared by participants as they told their stories.

As participants shared their perceptions, tutorial learning was identified as a support mechanism that links academic services with the personality preference types of students. With the combination of individual effort and university effort, the tutorial support services can be greatly enhanced to give students the opportunity to become independent learners by advantageously using their natural strengths and preferences, and also learning how to develop strategies that are the opposite of their preference types.
**Recommendations for Practice**

In an effort to address the contributions of this research study, the results give needed background information to academic support administrators of tutorial learning programs in a university campus-based setting. Higher education professionals can also utilize it, in general. Results gleaned from this study indicate several important recommendations for ways in which tutorial programs can be designed to better meet students’ needs.

The recommendations for practice, in accordance with the findings of the study, have implications that suggest that the college student population needs the provision of academic support and tutorial learning plays an instrumental role in today’s academic environment. The success of campus-based tutorial learning will depend on the structure and organizational setting, the academic ability of tutors, as well as their personal characteristics and interpersonal communication skills, and the ability to service students with varied backgrounds. The organizational structure of a tutoring center facilitates the use of formal assessments like the MBTI to enhance tutorial learning.

This assessment identifies personality preferences that are important non-cognitive factors that can contribute to students’ success and help to determine whether or not tutoring will be utilized advantageously. The MBTI addresses personality in terms of preference types. As noted throughout the study, personality preference types, according to the MBTI, are determined by the preferences an individual has on each of four preference scales. The personality preference types give evidence to the “recognition of individual differences” (Lynch, 1987, p.5).
These differences are important indicators of how people come to act, think, work, and particularly, for this study, learn. The uniqueness of these traits should be considered valuable, especially to educators. For tutorial learning administrators, the MBTI can be an essential tool in helping students learn how to learn, particularly as they transition into the learning environment and expectations of college level work.

The following recommendations for tutorial learning administrators are related to how the MBTI can be used in practice.

Foremost among the perceptions of students in this study was the idea of positive interactions with tutors who were knowledgeable. It was also apparent that participants wanted to be treated with respect. There is a need to address the training of tutors in three areas: communication skills, subject related skills, and the MBTI. To effectively aid students by improving their level of academic performance and confidence, tutors should be involved in basic training of the MBTI preference types. Administrators and tutors should have a basic understanding of type by first identifying their own preferences. Knowledge of personal preferences gives weight to personal styles of communication, learning, and, as a tutor, teaching. As evidenced in this study, MBTI information is applicable to learning as it can address learning through both efficient communication and styles of learning information.

From this study, it was found that students’ perceptions of the tutoring experience connected with the MBTI. The descriptions expressed through participant interviews provided relevant information in accord with MBTI research. The following section briefly identifies the relationships that were found between tutoring participants and the MBTI. The preference descriptions are drawn from Barron (1997), Carrell and Monroe

The first preference scale, extraversion – introversion (E – I), relates to how people relate to others. The extraverted students get their energy from other people. They like to talk and they think best when doing so, they are usually comfortable and confident in classroom settings, particularly those with activity and discussion. Extraverted tutees would rather have a tutoring session that would provide lively communication and a hands-on, active learning approach. The introverted students get their energy from quiet activities such as reading. They prefer to listen, rather than talk. Introverted tutees would rather have a tutoring session that would provide a quiet time, a time for concentration and the ability to think through a learning activity. Introverts are usually more comfortable alone, one-on-one with another person, or in a small group setting. They would enjoy private tutoring, reading, and quiet activities in their learning approach.

The second preference scale, sensing – intuition (S – N), relates to how people take in information. Sensing tutees would prefer to master the details, get the facts, and do so in a realistic way. The sensing preference leads a person to want to learn information in a practical way and then be able to apply it in their real life situations. Intuitive tutees would like to be creative in learning. Their preference is to be theoretical, and work with concepts, patterns, or relationships, and they prefer abstract, brainstorming activities. The preference for intuition leads a person to be less patient with learning facts because of the need to get the big picture and work on their own.
The third preference scale, thinking – feeling (T – F), relates to how one makes judgments or comes to a conclusion about something. In a learning setting, such as tutoring, the thinking-feeling scale also relates to performance. The tutees with the thinking preference as their dominant characteristic are prone to want a set of objectives to work toward. They are typically systematic and rule-based. The tutees with the feeling preference as their dominant characteristic are prone to be concerned about learning how what they learn can be applied to help people. They want their learning to be in a caring environment and they want a tutor who will give them attention and the motivation to work toward their learning goals.

The fourth preference scale, judging – perceiving (J – P), relates to what a student prefers in terms of a particular type of setting or learning environment. The judging students are oriented toward organization and structure. A tutee who prefers the judging characteristic would like to have an identified set of goals, possibly a time-line in order to work toward a specific academic task. The judging types prefer structure that leads to the end of an assignment in order to start another. The perceiving students are oriented toward flexibility in their learning environment. A tutee who prefers the perceiving characteristic would like to have time without restraints or deadlines, possibly to work on several things at the same time. The perceiving types prefer open-ended assignments that lead to a thorough examination of something. The perceiving types are likely to be thought of as procrastinators, but they can be just as productive as a judging type who will push through because they want to meet a deadline, often set on their own.

Knowledge of this preference information can assist administrators with the structure and organization of a tutorial learning program by considering several
components of tutoring in order to adequately serve the participants. Tutorial support can be improved by matching tutors and tutees with similar preferences to enhance communication and learning. Administrators of campus tutorial settings must ensure that campus-based tutors are equipped with the necessary academic skills for the subjects they tutor. Tutors need to have a command for the subject area and be able to apply it or explain it such that tutees are able to grasp the concepts. Additionally, other materials such as worksheets, computer software, and videos should be readily available as tutorial assistance as well. From this study, participants also indicated a desire for convenience in the times that tutoring was offered.

Finally, tutorial learning for students with varied backgrounds, abilities, and needs must be considered. It is important to assess the needs of each segment of the student population. For example, minorities at a predominantly white institution or adult learners may have special concerns regarding tutorial learning.

The MBTI can be utilized in each of the above areas by considering students’ preference types. Growth and development in the practice of tutorial learning should involve combining the knowledge of subject matter with cognitive and non-cognitive factors that address the student as a whole person. The MBTI assessment can identify those personality preferences that can contribute to a students’ success in a tutorial learning program.

**Recommendations for Research**

This study also yields several important recommendations for additional research in the areas of college level tutoring and the use of appropriate assessments such as the MBTI. Several areas for further research include
additional studies in the role of personality and tutorial learning, the role of tutoring styles in the process of tutoring, the role of assessment information to better assist students, and studies of the participants to assess their tutoring concerns. The following will address the above recommendations.

First, additional research about the role personality preferences play in students’ perceived experiences of tutorial services is needed. Presently, there are few studies that directly link personality preferences with tutorial learning. Replication studies at other universities would aid in the ability to generalize results to a larger group of students.

Second, tutorial learning research might be expanded at the college level to investigate how the tutoring styles influence the relationship that occurs in the tutoring process. The style of tutoring might include the exploration of structured vs. unstructured tutoring, the tutoring approach used by the tutor, i.e., one-on-one, group, walk-in lab with assistants, or technology lab without assistants.

Third, research is needed to explore the use of formal assessments in tutorial learning as a method to better aid students. The use of a formal assessment to discover the strengths and weaknesses in students’ learning behaviors and needs could be of value to the performance of students who attend tutoring. It could also be advantageous for tutors to better focus on the academic needs of the tutee.

Fourth, it is possible that because math is a skill specific subject, the preference differences could not be fully addressed. Students who participated in this study expressed differences in perceptions of the tutoring experience with
regard to tutors as well as subject matter. Finally, other qualitative studies in tutorial learning should be conducted to let the participants’ voice be a part of the research. To allow those students who have participated in tutoring programs to be heard maximizes the learning process for all involved: the tutor and tutee. As well, the administrator of the program also receives the benefit of research data that reflects the needs of the participants from their perspectives.

**Implications for Theory**

The MBTI offers versatility as well as practical utility in addition to its research validity and reliability (Barron, 1998; Lawrence, 1979; Schroeder, 1993). The theoretical underpinnings of this study are based on the work of Carl Jung. The application of his theory is based on the work of Briggs and Myers. Implications for theory as it applies to this study are offered as follows. As the MBTI is at the heart of this study, implications for theory, foremost, are the links that bring personality and learning together.

The focus of this study was tutorial support services in the field of higher education. While this study did not set out to examine the broad areas of personality and learning theory, it can be said that the MBTI indicates an avenue to be explored by educators at all levels. However, the conclusions of the study will be focused in the area of university tutorial support specifically, and the field of higher education in general.

Tutorial learning continues to be an active avenue of support in higher education. It may be one of the most important factors of a student’s growth in college. Tutoring is an instructional support service. Use of the MBTI serves as a valuable tool in the process of improving tutorial learning since it enables a student to learn how to learn. It is easier to educate students when taking into account their personality preferences by identifying
students’ strengths. The implication is that the MBTI provides a tutoring method to help students maximize their learning potential.

It is the responsibility of college students to seek the support they need to succeed. It is the responsibility of the system to provide adequate support. Tutoring provides an avenue for students to learn in their preferred learning style. Traditional thinking centers on giving students the skills “required” for success in a prescriptive manner that closely resembles a “one-size-fits-all” mode. However, the study of MBTI preferences and the participants in this study indicates that students need to be given opportunities for learning in a manner that best suits their learning style in order to maximize their full potential.

According to personality preference theory, people approach and solve problems differently. People think and learn in a variety of ways. Some people prefer a detailed, step-by-step approach. Others prefer a creative, theoretical approach. The preferences of individuals are salient and determine reactions to others involved in the process.

**Concluding Remarks**

The use of qualitative methodology was beneficial in uncovering the perceptions of students’ experiences in tutorial learning. In-depth individual interviews were conducted with the participants of the study and the MBTI was utilized to explore how their perceptions of tutoring related to their personality type preferences. The students who chose to participate in my study had also voluntarily chosen to receive tutorial learning services.

The shared stories of participants produced an increased awareness of how tutees decided to choose to attend tutorial learning, how they described their relationship
with the tutor, how they gained learning strategies, and how they perceived derived
benefits of tutorial learning.

Each student’s story reflected, in some way, both the perceptions they have of
tutoring and how their perceptions relate to personality preferences. The following
examples show the possible relationship involved in the students’ perception and his or
her personality preference.

In one statement, the following impressions are gathered from the participants.
For example, Sweet, an ESFP, identifies her sensing/feeling characteristic, saying that
she wants, needs, and feels as though she gets an explanation that she understands from
tutoring, and it makes her feel good, as she says, “more confidence.”

Sweet – ESFP: It gives me more confidence. That somebody’s going to actually
explain it to me. I know that they explain it so that I can
understand it.

Helpful, an ISFJ, also reflects his sensing/feeling characteristic by relating his
experience as one that he would recommend to other people and he states the reason why
he would recommend it. Helpful was also direct in communicating his thoughts, possibly
a relationship with the judging preference.

Helpful – ISFJ: I wish more people would go to it. There would be a lot less
people dropping out.

Cutie, an ESTP, also states that he thinks tutoring is good because the tutors are
there to help people and because the academic work can sometimes get overwhelming.
His statement makes me reflect on his personality preferences of an extroverted/thinker
who is sensing. He wants, needs, and feels good about relating to others who are
knowledgeable in the subject and it helps him complete his learning tasks.

166
Cutie – ESTP: I think it’s a good thing that they are there to help you because I know some people get overwhelmed in their work.

City boy, an INTP, reflects the intuitive/thinking characteristic in his comment. Just looking at his statement, there is an indication of his theory oriented, intuitive/thinking preference. He seems to be saying that he needs the help because he wants to do well academically. Because he is a first generation college student, he feels that the place to get the help he desires is from the tutors in the tutorial learning program.

City boy – INTP: It’s good to know I’m going to have outside help. I have a few friends. I have some family. None of my family is educated. None of them have gone to college. So, as far as them helping, as far as college goes, none of them know what to do or how to do it. So I also feel I have a personal friend, a personal teacher who will always be there to help me.

Homegirl, an ENFP, also makes a statement that reflects the intuitive/feeling preference. She has reflected upon the need to learn math “to get through” and finish the course. She seems to feel that her attitude is an important part of her to success.

Homegirl – ENFP: I changed my interests and the desire to want to know. I want to know it [math]. I want to get through. The more I understand and I’m able to do – that whole attitude changes from negative to positive.

Stilt, an ISTP, also gives a good idea about his sensing/thinking preferences by reflecting on putting the pieces together, getting the details and feeling good that the tutoring has enabled him to have “greater knowledge of the subject.”

Stilt – ISTP: I have a greater knowledge of the subject. It just helped fitting all the pieces I guess.

In an effort to see each student reach his or her full learning potential, it is important to appropriately assess the role of personality preferences as it relates to learning, particularly in the tutorial learning setting. The conclusions of this study
resulted in a more comprehensive understanding of what students want and need, and
how to possibly better serve them through tutorial learning support programs. The
findings may help to explore institutional practices that encourage excellence in
academics for all students. The results also address how students’ preferences relate to
their tutorial learning experience, specifically, and their overall learning, in general.
REFERENCES


Bender, D. S. (1997). Effects of study skills programs on the academic behaviors of college students. Paper presented at the Annual meeting of the Eastern educational research association, Hilton Head, SC.

education, Charlotte, NC. (ERIC Document Reproduction Service No. ED 449988).


Hoffer, T. B. (Summer, 1997). High school graduation requirements: Effects on dropping out and student development. Teachers College Record, 98(4).


Lawrence, G. (1979). People types and tiger stripes: A practical guide to learning styles. Gainesville, FL: Center for Applications of Psychological Type


Supplemental Instruction Update (2000, Fall/Winter). The University of Missouri-Kansas City. The Center for Academic Development.


Theall, M.. New Directions for Theory and Research in Teaching: A review of the past twenty years in New Directions for teaching and Learning, 80, Winter, 1999.


West, G. (1999). Teaching & technology in higher education: Changes and challenges. Adult Learning, 10(4), 16, Summer. American Association for Adult and Continuing Education.


Participant’s Name

(Print) ______________________________________________________

I hereby consent to participate in the research project entitled: *A Qualitative Exploration of College Students’ Experiences With Tutorial Learning*. An explanation of the procedures and/or activities and their purpose were provided to me in an oral presentation by: Angela Alexander, Doctoral Degree Candidate at Louisiana State University in Baton Rouge, Louisiana. I hereby give Angela Alexander and Louisiana State University all right, title, or interest in the tape-recorded interviews conducted for her dissertation.

I understand that these interviews will be protected by the use of a fictitious name assigned to me. Confidentiality will be provided and my identity will not be revealed. Additionally, I may withdraw from the study at any time without any penalties. I also understand that the transcripts may be used in public presentations including but not limited to audio or video documentaries, slide-tape presentations, plays, or exhibits. I further understand that the transcripts may be used for publications including but not limited to articles, books, or newsletters.

CHECK ONE:

Tapes and transcripts may be used without restriction ________.

Tapes and transcripts are subject to the attached restrictions ________.

Signature of Interviewee: ____________________________________________.
Date__________________

Contact Number/e-mail____________________________
APPENDIX B

INTERVIEW PROTOCOL

1. Tell me about the process by which you began tutoring at the Tutorial Learning Center. Describe how you arrived at the decision to attend tutoring.

2. What was your experience in the process of tutoring? Tell me about your interactions with the tutor.

3. Tell me about a time when you think it (tutoring) was successful.

4. Tell me about a time when you think it (tutoring) was unsuccessful.

5. How did your tutorial learning experience complement your preferred study method? Tell me how comfortable were you with the tutoring method(s)/learning strategies that were used. Tell me what made it comfortable/uncomfortable.

6. How did tutoring help you enhance specific skills that you would realistically use in your personal study methods? Tell me how (or if) tutoring assisted you with any of the following things: General organizational skills, Ability to better focus, Give more attention to details, Time management, Ability to put things in logical order, Become more adept at following a hunch.

7. I have a represented of each personality type according to the MBTI. Your type is (- - - -). Let me read to you a description of this type.
   a) Was this accurate?
   b) In what ways do you see yourself in this description?
   c) How do you make sense of this type in terms of your preferred learning style or study method?
8. To wrap up, tell me how you think your personality type played a part in your tutorial learning experience.

Feel free to call me if you begin to think or anything you want to add or clarify.

**NOTE:** All follow-up interviews will follow this method of questioning. Probing questions will be used throughout the interview(s) to gain a more comprehensive description of participants’ experiences.
June 2003

Dear Research Participant:

This correspondence is to request your participation in an educational research study. I, along with my graduate advisor and committee of professors, solicit your help. The purpose of the study is to explore the experiences of students’ who have received tutoring at the Nicholls State University Tutorial Learning Center. I believe that this awareness can lead to new ways of promoting the tutorial services as well as enhancing the delivery of services.

There is limited research on the experiences of college students who receive tutoring. One of the goals of this study is to provide an account of your experiences in your own words. If you are interested in participating, I would like to conduct an initial interview with you within the next several weeks. An additional interview may be warranted for the purpose of clarification and so that you might verify my conclusions. Your participation in this project is entirely voluntary.

I do hope that you will choose to assist me with this project. I look forward to talking to you. Sharing your experiences will be valuable part of this research. Along with your consent to participate you can be assured that extreme confidentiality will be maintained. If you agree to participate, please return this letter with your contact information. This information can be place on the back of the letter or you can e-mail or give me a call. Please contact me if you have questions or concerns regarding my request.

Respectfully,

Doctoral Candidate
Louisiana State University
Daytime: (985) 448 – 4098/ Evenings: 448 –3988

E-mail: frdv-aa@nicholls.edu
I am willing to participate in the interview portion of this research study.

Signed: ____________________________________________________

Printed name: ______________________________________________

Date:

I can be reached at the following number(s):

Phone:

Beeper:

E-Mail:

The best time(s) for me to speak to you are the following:

(Please list days and times)
APPENDIX D

UNIVERSITY CONSENT FORM

1. STUDY TITLE

A Qualitative Exploration of College Students’ Experiences With Tutorial Learning

2. Performance Sites

Louisiana State University/Nicholls State University

3. CONTACTS

The following investigators are available for questions about this study, M-F, 8:00 a.m. to 4:00 p.m. or can be reached by e-mail.

Dr. Becky Ropers-Huilman (225) 578 – 2892 or broper1@lsu.edu
Angela Alexander (985) 448 – 3988 or frdv-aa@nicholls.edu

4. PURPOSE OF STUDY

The purpose of this research project is to explore the experiences of students who participate in tutorial learning services on a college campus.

5. SUBJECTS

A. Inclusion: Individuals between the ages of 18 and 70 and who have participated in tutorial learning in any given semester since 1998.
B. Exclusion: No longer a student at the university; unable to participate in an on-campus interview or one within an hour’s drive of the university; unable to locate a record of the Myers-Briggs Type Indicator Profile.
C. Maximum number of subjects: 16

6. Study Procedures

The study will consist of no more than 3 rounds of in-depth interviews lasting 60 minutes each. A concluding focus group interview will be conducted with all participants lasting 90 minutes.

7. Benefits

The conclusions of the proposed study may result in a more comprehensive understanding of what students want and need, and how to explore institutional practices that encourage excellence in academics for all students. Additionally,
the results of the proposed study may urge college-level policy makers to consider students’ experiences when developing or implementing plans to enhance tutorial support.

8. **Risks/Discomforts**

   There is no known risk.

9. **Measures Taken to Reduce Risk**

   Only the co-investigator will conduct the interviews; Interviews will be conducted in a prior arranged, secure location, and it is assured that confidentiality is valued and of primary concern.

10. **Right to Refuse:**

    Participation in the study is voluntary and subjects may change their mind and withdraw from the study at any time without penalty or loss of any benefit to which they may be otherwise entitled.

11. **Privacy:**

    This study is confidential. While coding will be used, subjects cannot be identified in the research data directly or statistically, and no-one can trace back from research data to identify a participant. Confidentiality will be maintained by keeping a research file that will not be viewed by anyone other than the principal investigator, co-investigator, and/or transcriber. Records will also be maintained at the residence of the co-investigator in a secure location. Results of the study may be published, but no names or identifying information will be included in the publication. Data will be kept confidential unless release is legally compelled.

12. **Financial Information:**

    Incentives may be delivered to participants in the form of redeemable gift certificates.

13. **Withdrawal:**

    There are no consequences of a subject’s decision to withdraw from the study. At any point in which a participant does decide to withdraw the co-investigator will verbally agree to discontinue interview proceedings and explain that the individual is not required to have any further participation in the study.
14. **Removal:**

The investigator will remove an individual from the study without his/her consent after two (2) missed interview appointments.

15. **Signatures:**

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects’ rights or other concerns, I can contact Robert C. Mathews, Chairman, LSU Institutional Review Board, (225) 578 – 8692. I agree to participate in the study described above and acknowledge the researchers’ obligation to provide me with a copy of this consent form if signed by me.

Subject/Participant Signature:

________________________________________

Date:____________________________________
APPENDIX E

ACTIVITY PATTERNS BY TYPE

EI Preference

Extraversion ---------------- Introversion

Focus on variety and doing ---------------- opportunity for small group, Discharge of energy through ---------------- one-on-one, and individual activities Physical activity and action ------------------ space for private leisure Opportunities for multiple ------------------ opportunities for renewal through Interactions with others ------------------ solitude, nature, passive activities (e.g. a lecture)

SN Preference

Sensing ------------------ Intuition

Physical activities and sports ------------------ opportunities to use imagination and Established social structure ------------------ originality More naturally see possibilities for activities outside established channels

TF Preference

Thinking ------------------ Feeling

Opportunities for mastery ------------------ community service activities Development of technical or specialized skills ------------------ “cheerleading”/persuasive activities interpersonal focus

JP Preference

Judgment ------------------ Perception

Structured and established ------------------ spontaneous, unplanned activities and parties Leadership ------------------ sometimes over involvement without follow-through Concern for time (to get academics done) ------------------ play first, work later? limit-setting on leisure time
### APPENDIX F

#### TYPES

<table>
<thead>
<tr>
<th>Sensing Types</th>
<th>Intuitive Types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISTJ (5)</strong></td>
<td><strong>INTJ (1)</strong></td>
</tr>
<tr>
<td>Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter-of-fact, logical, realistic, and dependable. See to it that everything is well organized. Take responsibility. Make up their own minds as to what should be accomplished and work toward it steadily, regardless of protests or distractions.</td>
<td>Usually have original minds and great drive for their own ideas and purposes. In fields that appeal to them, they have a fine power to organize a job and carry it through with or without help. Skeptical, critical, independent, determined, sometimes stubborn. Must learn to yield less important points in order to win the most important.</td>
</tr>
<tr>
<td><strong>ISFJ (4)</strong></td>
<td><strong>INFJ (0)</strong></td>
</tr>
<tr>
<td>Quiet, friendly, responsible, and conscientious. Work devotedly to meet their obligations. Lend stability to any project or group. Thorough, painstaking, accurate. Their interests are usually not technical. Can be patient with necessary details. Loyal, considerate, perceptive, concerned with how other people feel.</td>
<td>Succeed by perseverance, originality, and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear convictions as to how best to serve the common good.</td>
</tr>
<tr>
<td><strong>ISTP (5)</strong></td>
<td><strong>ISFP (3)</strong></td>
</tr>
<tr>
<td>Cool onlookers—quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. Usually interested in cause and effect, how and why mechanical things work, and in organizing facts using logical principles.</td>
<td>Retiring, quietly friendly, sensitive, kind, modest about their abilities. Shun disagreements, do not force their opinions or values on others. Usually do not care to lead but are often loyal followers. Often relaxed about getting things done, because they enjoy the present moment and do not want to spoil it by undue haste or exertion.</td>
</tr>
<tr>
<td><strong>ESFP (4)</strong></td>
<td><strong>ENFP (1)</strong></td>
</tr>
<tr>
<td>Good at on-the-spot problem solving. Do not worry, enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. Adaptable, tolerant, generally conservative in values. Dislike long explanations. Are best with real things that can be worked, handled, taken apart, or put together.</td>
<td>Outgoing, easygoing, accepting, friendly, enjoy everything and make things more fun for others by the enjoyment. Like sports and making things happen. Know what’s going on and join in eagerly. Find remembering facts easier than mastering theories. Are best in situations that need sound common sense and practically ability with people as well as with things.</td>
</tr>
<tr>
<td><strong>ENFJ (1)</strong></td>
<td><strong>ENTP (0)</strong></td>
</tr>
<tr>
<td>Responsive and responsible. Generally feel real concern for what others think or want, and try to handle things with due regard for the other person’s feelings. Can present a proposal or lead a group discussion with ease and fact. Sociable, popular, sympathetic. Responsive to praise and criticism.</td>
<td>Warmly enthusiastic, high-spirited, ingenious, imaginative. Able to do almost anything that interests them. Quick with a solution for any difficulty and ready to help anyone with a problem. Often rely on their ability to improvise instead of preparing in advance. Can usually find compelling reasons for whatever they want.</td>
</tr>
<tr>
<td><strong>ESFJ (3)</strong></td>
<td><strong>INTP (1)</strong></td>
</tr>
<tr>
<td>Warm-hearted, talkative, popular, conscientious, born cooperators, active committee members. Need harmony and may be good at creating it. Always doing something nice for someone. Work best with encouragement and praise. Main interest is in things that directly and visibly affect people’s lives.</td>
<td>Quiet and reserved. Especially enjoy theoretical or scientific pursuits. Like solving problems with logic and analysis. Usually interested mainly in ideas, with little liking for parties or small talk. Tend to have sharply defined interests. Need careers where some strong interest can be used and useful.</td>
</tr>
<tr>
<td><strong>ENTJ (0)</strong></td>
<td><strong>ENTP (1)</strong></td>
</tr>
<tr>
<td>Practical, realistic, matter-of-fact, with a natural head for business or mechanics. Not interested in subjects they see no use for, but can apply themselves when necessary. Like to organize and run activities. May make good administrators, especially if they remember to consider others’ feelings and points of view.</td>
<td>Quick, ingenious, good at many things. Simulating company, alert and outspoken. May argue for fun on either side of a question. Resourceful in solving new and challenging problems, but may neglect routine assignments. Apt to turn to one new interest after another. Skillful in finding logical reasons for what they want.</td>
</tr>
<tr>
<td><strong>INFJ (0)</strong></td>
<td><strong>ISFP (3)</strong></td>
</tr>
<tr>
<td>Hearty, frank, decisive, leaders in activities. Usually good in anything that requires reasoning and intelligent talk, such as public speaking. Are usually well informed and enjoy adding to their fund of knowledge. May sometimes appear more positive and confident than their experience in an area warrants.</td>
<td>Full of enthusiasms and loyalties, but seldom talk of these until they know you well. Care about learning, ideas, language, and independent projects of their own. Tend to undertake too much, then somehow get it done. Friendly, but often too absorbed in what they are doing to be sociable. Little concerned with possessions or physical surroundings.</td>
</tr>
<tr>
<td><strong>INFP (0)</strong></td>
<td><strong>ENFJ (1)</strong></td>
</tr>
<tr>
<td>Usually good in anything and require reasoning and intelligent talk, such as public speaking. Are usually well informed and enjoy adding to their fund of knowledge. May sometimes appear more positive and confident than their experience in an area warrants.</td>
<td>Responsive and responsible. Generally feel real concern for what others think or want, and try to handle things with due regard for the other person’s feelings. Can present a proposal or lead a group discussion with ease and fact. Sociable, popular, sympathetic. Responsive to praise and criticism.</td>
</tr>
<tr>
<td><strong>INTP (1)</strong></td>
<td><strong>INFJ (0)</strong></td>
</tr>
<tr>
<td>Quiet, friendly, responsible, and conscientious. Work devotedly to meet their obligations. Lend stability to any project or group. Thorough, painstaking, accurate. Their interests are usually not technical. Can be patient with necessary details. Loyal, considerate, perceptive, concerned with how other people feel.</td>
<td>Succeed by perseverance, originality, and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear convictions as to how best to serve the common good.</td>
</tr>
<tr>
<td><strong>ISTP (5)</strong></td>
<td><strong>ISFP (3)</strong></td>
</tr>
<tr>
<td>Cool onlookers—quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. Usually interested in cause and effect, how and why mechanical things work, and in organizing facts using logical principles.</td>
<td>Retiring, quietly friendly, sensitive, kind, modest about their abilities. Shun disagreements, do not force their opinions or values on others. Usually do not care to lead but are often loyal followers. Often relaxed about getting things done, because they enjoy the present moment and do not want to spoil it by undue haste or exertion.</td>
</tr>
<tr>
<td><strong>ESFP (4)</strong></td>
<td><strong>ENFP (1)</strong></td>
</tr>
<tr>
<td>Good at on-the-spot problem solving. Do not worry, enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. Adaptable, tolerant, generally conservative in values. Dislike long explanations. Are best with real things that can be worked, handled, taken apart, or put together.</td>
<td>Outgoing, easygoing, accepting, friendly, enjoy everything and make things more fun for others by the enjoyment. Like sports and making things happen. Know what’s going on and join in eagerly. Find remembering facts easier than mastering theories. Are best in situations that need sound common sense and practically ability with people as well as with things.</td>
</tr>
<tr>
<td><strong>ENFJ (1)</strong></td>
<td><strong>ENTP (0)</strong></td>
</tr>
<tr>
<td>Responsive and responsible. Generally feel real concern for what others think or want, and try to handle things with due regard for the other person’s feelings. Can present a proposal or lead a group discussion with ease and fact. Sociable, popular, sympathetic. Responsive to praise and criticism.</td>
<td>Warmly enthusiastic, high-spirited, ingenious, imaginative. Able to do almost anything that interests them. Quick with a solution for any difficulty and ready to help anyone with a problem. Often rely on their ability to improvise instead of preparing in advance. Can usually find compelling reasons for whatever they want.</td>
</tr>
<tr>
<td><strong>ESFJ (3)</strong></td>
<td><strong>INTP (1)</strong></td>
</tr>
<tr>
<td>Warm-hearted, talkative, popular, conscientious, born cooperators, active committee members. Need harmony and may be good at creating it. Always doing something nice for someone. Work best with encouragement and praise. Main interest is in things that directly and visibly affect people’s lives.</td>
<td>Quiet and reserved. Especially enjoy theoretical or scientific pursuits. Like solving problems with logic and analysis. Usually interested mainly in ideas, with little liking for parties or small talk. Tend to have sharply defined interests. Need careers where some strong interest can be used and useful.</td>
</tr>
<tr>
<td><strong>ENTJ (0)</strong></td>
<td><strong>INFP (0)</strong></td>
</tr>
<tr>
<td>Practical, realistic, matter-of-fact, with a natural head for business or mechanics. Not interested in subjects they see no use for, but can apply themselves when necessary. Like to organize and run activities. May make good administrators, especially if they remember to consider others’ feelings and points of view.</td>
<td>Quiet, friendly, responsible, and conscientious. Work devotedly to meet their obligations. Lend stability to any project or group. Thorough, painstaking, accurate. Their interests are usually not technical. Can be patient with necessary details. Loyal, considerate, perceptive, concerned with how other people feel.</td>
</tr>
<tr>
<td><strong>ISFJ (4)</strong></td>
<td><strong>INFJ (0)</strong></td>
</tr>
<tr>
<td>Succeed by perseverance, originality, and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear convictions as to how best to serve the common good.</td>
<td>Usually good in anything and require reasoning and intelligent talk, such as public speaking. Are usually well informed and enjoy adding to their fund of knowledge. May sometimes appear more positive and confident than their experience in an area warrants.</td>
</tr>
</tbody>
</table>
VITA

Angela J. Alexander graduated from Spelman College in Atlanta, Georgia, in December 1978, where she earned a Bachelor of Arts degree in English. In January 1979, she enrolled at Northeast Louisiana University in Monroe, Louisiana, where she earned a Master of Education degree in counselor education.

Angela has been employed with Nicholls State University in Thibodaux, Louisiana, since August 1980. Initially, she held a counselor position with Student Support Services, a federally funded program for low income, disadvantaged youth who are first-generation college students. She is presently an Instructor in the Junior Division of the University. In addition to her teaching position, Angela has served in a variety of other capacities; among them she was the assistant director of the Tutorial Learning Center until 2002. She is also a licensed professional counselor in the state of Louisiana.

Angela has served on various university committees as well as having held positions and received recognition in state and national organizations. She has also published articles with the ERIC document services and the Journal for the National Association of University Women organization. Presently, she serves as a member of Board of Supervisors for the Southern University System.

Angela has one daughter, Regina Ashley Alexander, who is currently a freshman at Xavier University in New Orleans, Louisiana.