A Comparative Analysis of the Relationship Between Personality Style and Learning Preferences

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Individuals are unique in how they behave. Behaviors can be loosely grouped into personality types. These types can be useful in understanding and predicting behavior. This study was aimed at determining the relationship between an individual's personality type and their preferred method of learning.

A questionnaire was used to determine the personality types and learning styles of the target population. The resulting data was analyzed to determine any existing relationships. The target population was comprised completely of adults.

The results showed no obvious relationships between any personality type and a particular learning style. A large majority of the respondents did fall into one of two learning styles: Assimilator or Converger.

Based on the resulting data, it is the opinion of this researcher that more investigation needs to be done to determine if the educational system that the respondents were a part of during their fundamental years affected how they now learn. Traditional education was educator controlled, primarily lecture based and promoted individual rather than group learning. Respondents may have simply conformed to this style of teaching and now consider it their preferred method of learning. New data from alternative sources needs to be gathered to test this theory.
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CHAPTER 1

THE PROBLEM

Introduction to the Study

Individuals can quickly and easily be determined as unique and different from one another. These differences cover all aspects of human nature. Preferences in job, clothing, food, relationships and learning style, as well as other preferences create unique individuals, whether students or educators (Keirsey & Bates, 1984). Each individual can also claim a unique personality. Each personality is comprised of different beliefs, values, drives and other traits.

All of these aspects of human nature, learning styles and personalities included, can be loosely grouped together for ease of identification. To group individuals according to their learning style, one must first determine their preferred method of learning new information. Those students who learn better by reading a manual on a topic can be separated from those who prefer to learn with a more “hands-on” experiential learning approach. Students who learn new information according to their preferred learning style have increased the effectiveness of the instruction. Also increased is the retention and understanding of the student toward that material.

An educator who can determine each student’s preferred learning style
and can provide instruction utilizing that method will be more effective educating.

The question then becomes “Is there a quick and easy way for educators to determine a student's learning style?” This study proposes there is.

The relationship proposed for investigation in this study was between an individual's preferred learning style as determined by the Learning Style Inventory (Kolb, 1985) and their personality type as determined by The Keirsey Sorter personality temperament analysis tool (Keirsey & Bates, 1984). To determine the extent of the relationship, both the preferred learning style and the personality type of the target population had to be determined.

The Learning Style Inventory is a learning style analysis tool developed by David Kolb in 1981. The tool was designed to group individuals into 4 categories of preferred learning style. The categories are: Accommodator, Diverger, Converger, and Assimilator. Each category has its own strengths and method of information assimilation (Kolb, 1985). The category of Accommodator represents those learners who learn from “hands-on experience. The Diverger category is for those learners who enjoy approaching learning through observation. The Converger category groups learners who prefer to learn by finding solutions to problems and questions. The fourth category, Assimilator, prefers to understand the theory behind rather than the practical application of new information (Kolb, 1985).

The Keirsey Sorter is a typology tool that allows individuals to determine their own personality style. It is based on the Myers-Briggs Type Indicator which
was originally based on the personality work of C.G. Jung. Jung’s work was originally conducted in 1921 (Leviton, 1989).

Both tools were administered through a questionnaire. The purpose of this study was to determine if there was a positive relationship between the personality styles and the learning styles of individuals. Would the members of one type of personality prefer to learn in a specific mode?

Need for the Study

The shortcomings of education in general have been addressed in “A Nation at Risk,” a report by the National Commission of Excellence in Education (1983) and “An Imperiled Generation: Saving Urban Schools,” a report by the Carnegie Foundation (1988). In order to meet the challenge of providing better education for students, educators are being challenged to assess the learning style characteristics of each student and to provide teaching that is compatible with those characteristics (Griggs, 1991).

Development of the Problem

In order for educators to create the best possible learning environment for their students, educators need to know the learning methods preferred by the students. Unfortunately, most people are not aware of their preferred learning style. If there was a positive relationship between an individual’s personality type and their learning style, then educators could identify for the student (as well as for themselves) the student’s probable preferred learning style.

The results of this study may be useful for both students and educators.
Students who are able to identify themselves and their learning style will be able to improve their own learning by finding learning methods and educators that match their style as closely as possible.

The results may be useful to educators who could then create a learning environment that matches the learning style of the students as closely as possible.

The rationale that this study was based upon is similar to that which the Keirsey Sorter personality temperament analysis tool is based on.

Early in the 1920s, C.G. Jung concluded that influences in behavior are a result of preferences related to the basic functions personalities perform throughout life. These preferences emerge early in life forming the foundation of our personality (Jung, 1923). Later Katherine Briggs, a student of Jung’s, co-developed the Myers-Briggs Type Inventory, a personality type analysis tool on which the Keirsey Sorter tool is based. Katherine Briggs helped create the Myers-Briggs Type Inventory because she agreed with Jung’s theories that different people approach life differently (Myers, 1985).

Using the Keirsey Sorter, Myers-Briggs Type Inventory, or any other personality analysis tool, behavior can, to a certain extent, be predicted based on the personality type of an individual.

If this behavior can be predicted or explained based on a personality type, then what might also be predicted is the preferred method of information assimilation (or learning) that an individual finds best suited for themselves. The purpose of this study was to determine if this predicted determination was a
Possibility.

Purpose of the Study

The purpose of this study was to determine the relationship between a person’s personality type and their preferred learning style. This relationship would either be positive, indicating that a student’s personality type would be a good indicator of their preferred learning style or it would be negative, indicating no useful relationship existed.

Research Question

What is the relationship between a person’s personality type (as determined by The Keirsey Sorter analysis tool) and their learning style preference (as determined by the Learning Style Inventory)?

Definition of Terms

Accomodator: An Accomodator is one of the four types of Learning Style Identifier used by the Learning Styles Inventory. This individual learns best from “hands-on” experience. The Accomodator is good at getting things done, leadership and risk taking (Kolb 1985).

Assimilator: An Assimilator is one of the four types of Learning Style Identifier used by the Learning Styles Inventory. This individual is best at understanding a wide range of information and putting it into concise logical form. An Assimilator is good at planning, creating models, defining problems, and developing theories (Kolb 1985).

Cognitive Style: Intrinsic information-processing patterns that represent a
person's typical mode of perceiving, thinking, remembering and problem-solving (Keefe 1979).

Converger: A Converger is one of the four types of Learning Style Identifier used by the Learning Styles Inventory. This type of person seeks information that will enable them to solve problems and make decisions. A Converger is good at problem solving, decision making, deductive reasoning and defining problems (Kolb 1985).

Diverger: A Diverger is one of the four types of Learning Style Identifier used by the Learning Styles Inventory. This type of individual approaches situations through observation rather than acting and enjoys gathering information. A Diverger has strengths in imagination, understanding people, recognizing problems and brainstorming (Kolb 1985).

Keirsey Sorter: A personality analysis tool based on the Myers-Briggs Type Indicator. It is used to identify 16 different patterns of action (Keirsey & Bates 1984). The original tool, the Myers-Briggs Type Indicator, as well as the Keirsey Sorter tool were created to help individuals understand their differences and deal with these differences in a constructive manner (Kroeger & Thuesen 1988).

Learning Style: Consistent pattern of behavior and performance by which an individual approaches learning experiences. It is the composite of cognitive, affective, and physiological behaviors that serve as indicators of how a learner perceives, interacts with, and responds to the learning environment. It is formed in the deep structure of neural organization and
personality which molds and is molded by human development and the cultural experience of home, school and society (Bennett 1990).

Personality: The relatively stable set of psychological characteristics that influence the way an individual interacts with their environment (Johns 1996).

Personality Type: One of a group of Temperaments, developed to group individuals by similar personalities. An individual's personality summarizes their personal style of dealing with the world (Johns 1996). One of a variety of modes that individuals use in psychological functioning (Ryan, 1991).

Organization of the Remainder of the Study

The remainder of this study is divided into four chapters. Chapter Two is dedicated to the review of current literature applicable to this research question. It discusses personality, the Keirsey Sorter analysis tool as well as learning methods.

Chapter Three discusses the methodology used for this study. Chapter Four presents the data collected using the methods discussed in Chapter Three and a preliminary evaluation of that data. The final chapter, Chapter Five, includes the researcher's conclusions based on the data collected. This chapter also contains a summary of the study as well as recommendations for future research.
CHAPTER 2
LITERATURE REVIEW

Introduction

Personality is one thing that each person has, but no two are alike. What makes up a personality is as varied as the personalities themselves. A personality is based on the fundamental fact that each person is different. Individuals want and need different things and have different motives. Each person varies from their neighbor in their purpose, aim, values, impulses and urges among other things. Each person believes differently from one another. Also different are the ways that individuals think, conceptualize, perceive, understand and comprehend. Each of these areas of difference leads to unique and different people (Keirsey & Bates, 1984). Even with all of these differences, individuals have commonalities with one another. Commonalities that allow them to be loosely grouped into categories or styles. These styles can help to explain and, to a certain extent, predict behavior. The purpose of this study was to determine if an individual's personality style could help to predict their preferred learning style. The literature is presented in five sections: personalities, temperaments, determining a type, the 16 profiles and learning.

Personalities

Personalities have been studied to better understand individuals. Knowing an individual's personality will enable better understanding, predicting
and appreciation of their behavior. Because no two people are alike, an individual does not have a natural understanding of other individuals without studying them. Understanding the basic theories of personality will allow individuals to apply those theories to other individuals to better understand them. Differences between individuals can now be seen as differences rather than flaws or afflictions (Keirsey & Bates, 1984). The study of personality also allows the prediction, to some extent, of the behavior of an individual, as well as promoting the appreciation of each individual's uniqueness (Keirsey & Bates, 1984).

Personalities have been analyzed and studied since the time of Hippocrates. According to Keirsey and Bates (1984), the theories and theorists have fallen into three categories: those who believe that the personalities can be grouped into four loose categories or temperaments, those who believe personalities are determined dynamically, and those who believe that personalities are behaviorally based.

There are probably as many theories to describe behavior (temporally, dynamically or behaviorally) as there are different personalities. One of the original theories put forth was by the Greek scholar Hippocrates in the Fifth century BC. Hippocrates was the first known theorist to classify the human personality into temperaments. These temperaments were: sanguine, melancholic, choleric, and phlegmatic (Sargent and Stafford, 1965).

As with most temperament theories of personality, Hippocrates' types were based on four physical characteristics. His four temperaments were based
on the amount or dominance of a particular type of bodily "humor" or fluid. If a person had a dominance of red blood, they were said to have a sanguine temperament. Black bile equated a melancholic temperament, yellow bile a choleric temperament and phlegm indicated a phlegmatic temperament (Sargent and Stafford, 1965).

These temperament classifications remained highly influential until the seventeenth and eighteenth centuries (Sargent and Stafford, 1965). They were eventually replaced by the Dynamic and Behaviorist psychology. Behavior and personality were then explained by the unconscious motives or past experiences of a person (Keirsey & Bates, 1984).

During the early twentieth century, the temperament theorists had a revival and came back into the foreground of study in the area of personality. The theorists who believed that human personality could be divided into four categories used a variety of names and points of view to describe their theories. In 1907 Adickes divided his four categories by world view (dogmatic, agnostic, traditional, and innovative). Kretschmer, around 1920, used the following four categories: hyperesthetic, anesthetic, melancholic and hypomanic (Keirsey & Bates, 1984).

Even Jung had personality types. His were known as "function types." Jung's approach was based on normal, healthy people rather than abnormal, ill people or psychology (Jung, 1938). As with all previous personality theorists, Jung believed that each individual would be born with a predisposition to certain personality preferences. The healthy development of these preferences, Jung
believed, would lead to a healthy lifetime (Kroeger & Thuesen, 1988). Jung took the concept of personality typing one step further. He created two main personality “attitudes of adaption” into which, he felt, all humans could fall. He theorized that these two main types of personality traits, introversion and extroversion, effected behavior independent of other modes of behavior (Sargent and Stafford 1965). This main classification reflects where a person places more importance, either internally or externally. Jung did caution that no individual is exclusively one type or the other but instead a combination of both. A relative predominance of one determines the preferred type (Jung, 1938).

According to Sargent and Stafford’s (1965) definition of introversion and extroversion, introverts are more internal and are preoccupied with their own psychological processes. Extroverts are more preoccupied with the world outside themselves. Another way to verbalize the difference between the two attitudes is to discuss where individuals prefer to focus their attention: in the mind or on the world. These two choices are not an either/or choice but exist together in all people. One mode, introvert or extrovert, will dominate an individual’s personality (Leviton, 1989).

Jung’s four functions or modes of orientation are sensing, intuition, thinking, and feeling. Sensing and intuition describe the ways of acquiring information that an individual will utilize. Information will either be acquired factually, through concrete data from the senses or from inner links, connections and meanings. Thinking and feeling, although they appear unconnected, deal with how an individual processes the information received and how they make
decisions for action. The "thinking" individual considers logical consequences when making a decision, the "feeling" individual makes the same decisions based on person-centered values that they hold (Leviton, 1989).

Each theorist used a unique point of view for their theory and created their own phrases and words, but all came to the same conclusion. Individuals could be grouped according to their actions, beliefs, and values (Sargent and Stafford, 1965). Current temperament theorists continue to group individuals into categories of four. These groups have been labeled after animals (ostrich, lamb, rhino, and chameleon), cars (Lexus, pickup, minivan, VW bug) or more scientific titles (Phlegmatic, Choleric, Sanguine, Melancholy). The results, however, are always the same: individuals loosely fit themselves and those they interact with into groups to improve their understanding of self and others.

The Myers-Briggs Type Indicator created 16 types by combining four pairs of personality traits. These four pairs fell neatly into the sets of four types created by past theorists. This arrangement allowed greater cross-referencing and support of these theories (Keirsey & Bates, 1984).

The Myers-Briggs Type Indicator was developed by Isabel Myers and Katheryn Briggs (Myers & McCaulley, 1985). It is based on Jung's "function types" and groups individuals into 16 types. Rather than having four groups for all individuals to fit into, the Myers-Briggs Type Indicator used 4 sets of pairs. Each pair measures the same characteristic to create paired or bipolar opposites arranged along an axis. This format created a scale for each characteristic and could better rate each individual as to where their personality lay on the scale.
This scale would then be used to classify individuals based on 16 styles (the maximum number of combinations of the four pairs) (Keirsey & Bates, 1984).

When an individual's preferences are analyzed, it is found that all four functions are usually not equally consciously available. Jung labeled the levels of consciousness as "dominant" or "superior" for the most developed mode. The next two were labeled as "auxiliary." The least developed mode, the one that most resists integration into the consciousness was labeled as the "inferior" mode (Leviton, 1989).

**Temperaments**

The idea behind the development of the Myers-Briggs Type Indicator was to establish individual preferences and then to promote a more constructive use of those differences between people (Myers, 1985). According to Nelson (1996), another reason that the Myers-Briggs typology, along with others, is important is because they help individuals understand the eyes in which they see the world. In other words, not only can individuals better understand others but they can also better understand themselves and their own perspectives of the world. Their 126-item questionnaire or inventory was created to actualize Jung's typology and to give individuals a concrete basis on which their learning and understanding could be based (Leviton, 1989).

The Myers-Briggs Type Indicator is not a traditional psychological test. It is value neutral, meaning that it does not contain an assessment of weaknesses, "good" or "bad" characteristics, or evidence of a pathology. It is, instead, a way of explaining "normal" rather than abnormal psychology. It enables the user to
view actions objectively and to recognize differences among individuals. The Myers-Briggs Type Indicator is based on the belief that there is no one “best” style (Kroeger and Thuesen, 1988).

**Determining a Type**

In order to truly utilize the Myers-Briggs Type Indicator, individuals as well as educators first need to determine their personality type. Once that has been established, they can then begin to interpret others’ types based on their actions. There are a variety of ways to determine types. The “official” way is to take the Myers-Briggs Type Indicator instrument which can only be purchased and administered by a trained and qualified individual. Other less formal methods include the self administration of the Keirsey-Bates Temperament Sorter or the general matching through reading descriptions printed in various books. By whatever method an individual’s type is discovered, it is still helpful in understanding oneself and others. (See Appendix A for the self administered survey used for this study.)

The method used in Kroeger & Thuesen’s (1988) book *Type Talk* is one that uses generalities. A reader will read a number of statements and determine which apply to themselves. The types are grouped by pairs. The type from each pair that receives the most “Yes, that sounds like me” responses is likely to be that individual’s type.

For a brief understanding of the four main pairings of the type profiles, a comparison can be made as follows:
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<tr>
<th><strong>Extravert</strong></th>
<th><strong>Introvert</strong></th>
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<td>Breadth</td>
<td>Depth</td>
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<td>Multiple relationships</td>
<td>Limited relationships</td>
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<td>External events</td>
<td>Internal reactions</td>
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<td>Gregarious</td>
<td>Reflective</td>
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<tr>
<td>Speak, then think</td>
<td>Think, then speak</td>
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<tr>
<th><strong>Sensor</strong></th>
<th><strong>iNtuitive</strong></th>
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<td>Future</td>
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<td>Realistic</td>
<td>Conceptual</td>
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<td>Down-to-Earth</td>
<td>Head-in-the-Clouds</td>
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<tr>
<td>Fact</td>
<td>Fantasy</td>
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<tr>
<td>Specific</td>
<td>General</td>
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<th><strong>Thinker</strong></th>
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<td>Objective</td>
<td>Subjective</td>
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<td>Firm-minded</td>
<td>Fair-hearted</td>
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<td>Laws</td>
<td>Circumstances</td>
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<tr>
<td>Clarity</td>
<td>Harmony</td>
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<tr>
<td>Detached</td>
<td>Involved</td>
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<th><strong>Judge</strong></th>
<th><strong>Perceiver</strong></th>
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<td>Decided</td>
<td>Wait and See</td>
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<tr>
<td>Fixed</td>
<td>Flexible</td>
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<tr>
<td>Control</td>
<td>Adapt</td>
</tr>
<tr>
<td>Closure</td>
<td>Openness</td>
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<tr>
<td>Scheduled</td>
<td>Spontaneous</td>
</tr>
</tbody>
</table>

(Kroeger & Thuesen, 1988, pgs. 24, 28, 32, & 37)

The following is a sample of the statements that can be used to determine an individual's personality type (Kroeger & Thuesen, 1988).

If you are an **Extravert**, you probably:

- tend to talk first, think later
- like going to parties and talking with many people rather than just a few
- find listening more difficult than talking

If you are an **Introvert**, you probably:

- rehearse things before saying them
- enjoy the peace and quiet of having time to yourself
- are perceived as "a great listener"

If you are a **Sensor**, you probably:
like to concentrate on what you are doing at the moment
would rather do something than think about it
believe that “if it ain’t broke, don’t fix it”

If you are an iNtuitive, you probably:

tend to think about several things at once
are prone to puns and word games
like figuring out how things work for the sheer pleasure of it

If you are a Thinker, you probably:

are able to stay cool, calm and objective in all situations
enjoy proving a point for the sake of clarity
remember numbers and figures more readily than faces and names

If you are a Feeler, you probably:

feel that “love” cannot be defined
will overextend yourself meeting other people’s needs
put yourself in other people’s moccasins

If you are a Judger, you probably:

are always waiting for others, who never seem to be on time
don’t like surprises
are accused of being angry when you’re not

If you are a Perceiver, you probably:

are easily distracted
love to explore the unknown
turn most work into play

(Kroeger & Thuesen, 1988, pgs. 14-22)

Once an individual has determined the four letter profile that bests fits
themselves, it is advised that they then begin reading the more detailed type
analysis that belongs to that profile (also included in the Type Talk book, Kroeger
& Thuesen, 1988). The next step is to learn about the other types of profiles that
are in the world.
The 16 Profiles

The following are brief descriptions by Kroeger & Thuesen (1988) of the 16 possible type profiles as determined by the Myers-Briggs Type Indicator and others:

**ISTJ** (Introvert Sensor Thinker Judger)
Will do what should be done in life regardless of personal discomfort or unease.

**ISFJ** (Introvert Sensor Feeler Judger)
Has a high sense of duty and is focused outwardly in the service of others.

**INFJ** (Introvert iNtuitive Feeler Judger)
Are seen as an inspiration to others because of their quiet strength and dedication to an ideal or cause.

**INTJ** (Introvert iNtuitive Thinker Judger)
Believe that everything and everyone has room for improvement and this improvement comes through learning.

**ISTP** (Introvert Sensor Thinker Perceiver)
Ready to try anything once as long as it involves their hands and requires immediate attention.

**ISFP** (Introvert Sensor Feeler Perceiver)
Sees much but shares little, preferring to live in harmony with all things and people.

**INFP** (Introvert iNtuitive Feeler Perceiver)
Performs noble service to aid society in order to seek fulfillment of themselves and their ideals.

**INTP** (Introvert iNtuitive Thinker Perceiver)
Loves problem-solving and collecting new data to reach that "perfect solution" which will change with new data.

**ESTP** (Extravert Sensor Thinker Perceiver)
The ultimate realist, preferring to live in the moment, this moment not the one that just pasted or the one that is quickly coming up.

**ESFP** (Extravert Sensor Feeler Perceiver)
Believes that you only go around once in life and so no time should be wasted in preparations, conflicts or the unobtainable.

**ENFP** (Extravert iNtuitive Feeler Perceiver)
Believes in giving life an extra squeeze through their enthusiasm and zest for life.

**ENTP** (Extravert iNtuitive Thinker Perceiver)
Finds one exciting challenge after another and their attention will follow the new challenge.

**ESTJ** (Extravert Sensor Thinker Judger)
Thought of as life's administrators and will work to organize, structure and
schedule that life.

**ESFJ (Extravert Sensor Feeler Judger)**
Thought of as the Host and Hostesses of the world, making all around them feel comfortable and at ease.

**ENFJ (Extravert iNtuitive Feeler Judger)**
The smooth talking persuader, with talents in motivating others to do what they want.

**ENTJ (Extravert iNtuitive Thinker Judger)**
This personality type is life's natural leaders, organizing and directing others toward a common goal.

(Kroeger & Thuesen, 1988, pgs. 214-280)

**Learning**

As individuals differ based on their unique personalities, so do students vary in the ways in which they take in and process information and approach learning situations. Some students prefer to be alone when they learn, others prefer to be a member of a group. Some students tend to focus on facts and data while others are more comfortable with theories and mathematical models.

Some of the other dichotomous characteristics of learners are:

- **Absolute quiet** -- Surrounded by noise and movement
- **Structure and support from Instructor** -- Independent and self-motivated
- **Prefer oral instructions** -- Need to see instructions in writing
- **Require warm personal rapport** -- Do not require that personal rapport
- **Utilize inductive reasoning** -- Prefer deductive reasoning
- **Formal environment** -- informal environment. (Bennett, 1990, p. 46)

These differences in learning preference can be grouped under the term "learning style." The National Task Force on Learning Style and Brain Behavior defines learning style as the following:

A consistent pattern of behavior and performance by which an individual approaches learning experiences. It is the composite of characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment. It is formed in the deep structure of neural organization and personality which molds and is molded by human
development and the cultural experience of home, school and society. (Bennett, 1990, p. 48)

Discovering the ideal situation in which each student learns best as well as discovering the learning situation that least suits the student can help instructors to create learning situations that are beneficial to the students. Teaching students exclusively in either their least or most preferred learning style is not as beneficial as teaching students with a combination of the two. Teaching exclusively in the student’s least preferred learning style will raise the student’s discomfort level to the point that learning is not achieved. Teaching exclusively in the student’s most preferred learning style, however, will not encourage the student to become comfortable with any other style but that one. Teaching with a combination will allow the student to stay within a comfort zone for learning but will also encourage them to become comfortable with other styles.

Understanding learning styles can directly help make these necessary improvements a reality by helping both students and instructors. Encouraging students to learn about their different learning preferences will allow them to become more interactive and involved with their own learning. Instructors that are aware of the different learning styles can then adapt the learning situations to meet those differences (Murrell & Claxton, 1987).

When studying learning styles, most approaches vary. Curry (1987) conceived the “onion model” to help provide consistency and a framework for comparing theories. The model consists of four levels of concentration: 1) personality dimensions, 2) information processing, 3) social interaction,
4) instructional preference. They are defined as follows:

**Personality Dimensions:** assess the influences of basic personality on preferred approaches to acquiring and integrating information. Models stressing personality include the Myers-Briggs Type Indicator.

**Information Processing:** the individual's preferred intellectual approach to assimilating information, and include Kolb's Learning Style Inventory, a model of information processing.

**Social Interaction:** addresses how students interact in the classroom.

**Multidimensional and Instructional Preference:** addresses the student's preferred environment for learning (Curry, 1987).

The Herrmann Brain Dominance Instrument (Herrmann, 1990) approach to learning styles was developed to classify students in terms of their relative preferences for thinking into four different modes that are based on the functioning of the physical brain. The four modes or quadrants are:

- **Quadrant A** (left brain, cerebral). Logical, analytical, quantitative, factual, critical
- **Quadrant B** (left brain, limbic). Sequential, organized, planned, detailed, structured
- **Quadrant C** (right brain, limbic). Emotional, interpersonal, sensory, kinesthetic, symbolic
- **Quadrant D** (right brain, cerebral). Visual, holistic, innovative. (Herrmann, 1990, pg. 12)

The model used for this study was Kolb's Learning Style Model (1984) on which the Learning-Style Inventory was based. Kolb classifies students on two axis: how they take information in and how they internalize that information. Students take information or have a "perception of the learning event" through
either concrete experience (sensing and feeling) or through abstract conceptualization (thinking and analyzing). Students internalize or process what they have learned through active experimentation (doing) or reflective observation (watching).

The four types of learners derived from this model are:

- Diverger
- Assimilator
- Converger
- Accomodator

A student that could be classified as a Diverger would use the question of "Why?" Diversers respond well to explanations of how course material relates to their experiences, their interests, and their future careers. To be effective with Diverger students, the instructor should function as a motivator.

Assimilator students utilize the question of "What?" and respond to information presented in an organized, logical fashion and benefit if they have time for reflection. To be effective, the instructor should function as an expert.

A characteristic question of the Converger is "How?" These students respond to having opportunities to work actively on well-defined tasks and to learn by trial-and-error in an environment that allows them to fail safely. To be effective, the instructor should function as a coach, providing guided practice and feedback.

Accomodators use the question of "What if?" and like applying course material in new situations to solve real problems. To be effective, the instructor should stay out of the way, maximizing opportunities for the students to discover
things for themselves (Kolb 1984).

**Summary**

Personalities have been studied throughout history so that individuals can better understand each other. Personalities are traditionally grouped into sets of four. The Myers-Briggs Type Indicator uses instead four sets of dichotomous personality traits (Extravert – Introvert, Sensor – iNtuitive, Thinker – Feeler, and Judger – Perceiver). Using these four pairs of traits, individuals can place themselves into one of the 16 personality types available.

Learning is also a trait that has been studied. David Kolb (1984) created a model that used two axes to classify students and their learning preferences: how they take in information and how they internalize that information. These two axes formed four types of learners: (Diverger, Assimilator, Converger, and Accomodator).
CHAPTER 3
METHODOLOGY

Introduction

The intent of this study was to gather information regarding the relationship between an individual's personality type and their preferred style of learning. The purpose of this study was to examine the question: if behavior is to a certain extent predictable based on personality style, then could an individual's learning style also be predicted based on personality style? The research question was: what is the relationship between a person's personality type and their learning style preference?

Research Design

The design selected for this study was the descriptive research design.


The central focus of descriptive research is to examine facts about people, their opinions and attitudes. Its purpose is not to give value to sets of relationships between events, but simply to draw attention to the degree two events or phenomena are related...Its purpose is to systematically describe the facts and characteristics of a given phenomenon, population, or area of interest. (p. 61)

The nature of the descriptive design enabled this researcher to study the relationship between an individual's personality type and their preferred style of learning. The data gathered in this descriptive research project was representative of the respondents' actual self-perceptions at one point in time.
One of the advantages of a descriptive research study is that data could be collected relating to the phenomenon and the target population without the manipulation of variables necessary in an experimental research study. No variables were manipulated in this study in regards to the research data gathered. This design was also chosen because a questionnaire enabled the researcher to gather information from several individuals with little interaction from the researcher. Decreased researcher interaction was beneficial to control the possibility of leading the participants toward a desired response.

This researcher compared the self-perceptions of respondents with similar personality types to determine if there was a positive relationship between that and their preferred learning style that could be utilized in the future.

**Population and Sample**

To determine the relationship between these two factors (personality type and learning style), the factors first needed to be determined independently for each member of the target population. The target population consisted of adults in both learning situations and in working situations.

The participants ranged in age from 26 to 47 years of age. The gender were represented by a percentage of 21% Male and 79% Female.

The respondents were chosen for convenience because the researcher had personal or work interaction with the participants. Other participants were selected through their relationship with volunteers helping to gather data for this study. All of the research participants were volunteers. No names were requested by the researcher so to maintain anonymity and not create a bias
when the data was evaluated. Respondents could give their names if they wanted feedback from the study. This information was kept separately from the data until the completion of the study. Questionnaires were given to forty-five people and twenty-seven were returned.

**Instrumentation**

The data for this study was obtained through a closed (forced-choice) question survey that was given by the researcher. The survey used multiple choice questions for obtaining the data. A Likert Scale (a numbered scale that rates the degree of pertinence of the topic to the respondent) was used to obtain statistical data on the degree of the perceived personality traits of the respondents and the relationship to their preferred learning style.

No time limit for responding to the questionnaire was set. All respondents were given stamped return envelopes to use in returning the surveys to the researcher.

There has been a great deal of research done on the subject of personality types and learning styles. The researcher has reviewed several surveys used in this type of research and chose two to be used for this study. The final questionnaire (see Appendix A) consisted of two categories: personality type and learning style.

The questions to be used for the first half, the personality type portion were originally developed by Isabel Myers and Katheryn Briggs in the 1920's and later adapted into the Keirsey Sorter, the actual survey used for this study. The survey begins with these questions numbering 42. Each is a scaled response
question that helps to determine the respondent's strongest personality type.

According to the reliability testing conducted by Isabel Myers (1985): "in conclusion, test-retest reliability of the Myers-Briggs Type Indicator show consistency over time. When subjects report a change in type, it is most likely to occur in only one preference, and in scales where the original preference was low" (p. 276).

One way to show validation of the Myers-Briggs Type Indicator is to compare the results of the Indicator with self-assessments of type preferences based on participants selecting the type description that they feel best fits themselves. There is a 6.25% chance factor that participants will choose their type preference correctly.

Two studies were noted by Myers (1962) to show validation. Both studies were conducted on introductory psychology students (Study 1: 129 students, Study 2: 118 students). The reported type was ranked first significantly more often than chance for both samples: 66% and 75%, respectively. The percentage of students giving first rank to the opposite of the reported type were 4% and 13%.

The second half of the questionnaire focused on the preferred learning style of the respondent. The questions (numbering 12) used for this portion were developed by David Kolb (1981) and are also Likert Scaled response questions. Respondents are asked to rank four sentence endings that will complete each of the 12 statements. The questionnaire was designed so that the questions would
not be leading, so that the questionnaire was user friendly and would provide for ease in determining statistical data.

According to the technical specifications furnished by McBer & Company (1995), the publishers of the Learning Style Inventory, this inventory has a very high reliability.

The four basic scales (representing the four learning styles: CE, RO, AC, and AE) and the two combination scores (AC-CE and AE-RO) all show very good internal reliability as measured by Cronbach’s (n=268). The combination scores show almost perfect additivity (1.0) as measured by Tukey’s test. (p. 4)

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Standardized Scale Alpha</th>
<th>Tukey's Additivity Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Experience (CE)</td>
<td>.82</td>
<td>.91</td>
</tr>
<tr>
<td>Reflective Observation (RO)</td>
<td>.73</td>
<td>1.09</td>
</tr>
<tr>
<td>Abstract Conceptualization (AC)</td>
<td>.83</td>
<td>1.07</td>
</tr>
<tr>
<td>Active Experimentation (AE)</td>
<td>.78</td>
<td>1.03</td>
</tr>
<tr>
<td>Abstract-Concrete (AC-CE)</td>
<td>.88</td>
<td>1.00</td>
</tr>
<tr>
<td>Active-Reflective (AE-RO)</td>
<td>.81</td>
<td>.99</td>
</tr>
</tbody>
</table>

(McBer & Company, 1995, p. 4)

The questionnaire was valid because it measured only the respondent’s self-perception of their personality type and preferred learning style as it was designed to do.

Assumptions and Limitations

The assumptions and limitations of this study were based on both the study design and on the subject: human nature. The researcher assumed that the respondents were aware of the ways in which they preferred to learn new information or skills.

This study also assumed that each questionnaire respondent was honest in their answers and rankings of the question choices. One limitation in this area
is, according to Sharp (1987), that the individual taking the test might be responding out of the unconscious. This could skew the results.

The limitations of the descriptive research method are that it lacks the power to predict the future with any certainty. Descriptive research describes "what is" or "what was" but the researcher has difficulty generating or predicting "what will be" (Merriam and Simpson, 1995).

Other limitations were based on the complexity and ever changing nature of human behavior. This cross sectional study was looking at the target population as they were on the day they completed the questionnaire. Human nature and behavior is an evolving, ever-changing process. What might have been valid on the day of the study may not be valid in the years, months or even days following, as the members grow, age and experience new situations.

One caution that does need to be stated is that this study was not intended as a final and closed learning style identifier. Each individual is different. To stereotype individuals based on a first impression and force that individual into a learning situation based on any results of this or any other study could cause more harm to that individual than good. This paper was intended as a guide only. It was written to give students and educators an idea of what could be the most appropriate learning environment for that individual.

Sharp (1987) stated in regards to the use of typologies:

We do use Jung's model in our daily evaluation, but the tests can be very misleading. Rather than give somebody a false idea of what they are, as people tend to label themselves on the spot, we feel its better to stay open to what one's typology might be. Type-testing has a great danger of solidifying things that really can't be. (p. 25)
This sentiment can be applied to any analysis tool that attempts to group individuals, including the Learning Style Inventory.

**Procedure**

The questionnaire was distributed through the mail to the participants by the researcher. The questionnaires were mailed to the participant’s home address. The survey was given during the months of January, February, and March 1997. Instructions (Appendix B) were given to the respondents at the time of delivery (in written format) in regard to the need for honesty when replying and on the use of the Likert Scale.

Confidentiality was assured (in oral format) and the participants were told that the information gathered was to be used for this research project only and would not be distributed in any fashion. At the respondent’s request, however, a final summarized report (complete with their personalized information regarding personality preference and learning style preference) would be mailed to them for review. Completed questionnaires were gathered immediately.

**Method of Analysis**

Personalities are comprised of a combination of several factors, each one could easily have its own analysis tool. It was not possible to strictly categorize the data by each individual factor. The Keirsey Sorter, the tool used in this study, was designed to determine the general category into which an individual best fits. This study did not examine each factor that helps to create a personality and therefore helps to determine learning style preferences. It was instead only concerned with the general groupings of individuals and their personalities.
The questionnaires were first systematically reviewed individually to determine the preferred personality style and then learning style of each respondent. That data was then summarized and compared. Trends and similarities were drawn based on this comparison. These trends were reviewed and statistically plotted. This information was plotted and graphically represented, as shown in Chapter 4.
CHAPTER 4
PRESENTATION AND ANALYSIS OF THE DATA

Introduction

All of the research participants in this study were volunteers and were guaranteed that their responses would be treated with confidentiality. Therefore, the specific respondents' names are not identified. Each survey was accompanied with an informational sheet telling the respondents the purpose of this research study and their role in that study.

The target population consisted of adults in both learning situations and in working situations. The respondents were chosen for convenience because the researcher had personal or work interaction with the participants. Other participants were selected through their relationship with volunteers helping to gather data for this study.

The preliminary evaluation of the data showed that the respondents were evenly distributed among the 16 personality types with only one exception: twice as many respondents had the personality type of ESTJ as any other type. The learning styles were not as evenly distributed, however.

Personal Data

No personal data was asked of the respondents. Some gave the information voluntarily. Of the 19 respondents that did give personal data, it was
determined that 21% of the respondents were male and 79% were female.

The average age of respondents was 32.42 years. Of the people surveyed, 63% were in the 20-29 year age group, 10% were 30-39 years old, 21% were 40-49 years old, and 5% were 50 plus years. No respondent was under the age of 22 or over the age of 57.

The responses to these surveys came from people who were in positions that required some sort of specialized training. The respondents had also, in most cases, been out of the traditional educational setting for several years.

Findings by Personality Type

The Keirsey Sorter evaluates personalities based on four pairs of traits.

The 27 respondents were grouped in the four pairs as follows:

<table>
<thead>
<tr>
<th>Introvert</th>
<th>Extrovert</th>
<th>iNtuitive</th>
<th>Sensing</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>14</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Thinking</td>
<td>Feeling</td>
<td>Judging</td>
<td>Perceiving</td>
</tr>
<tr>
<td>16</td>
<td>11</td>
<td>18</td>
<td>9</td>
</tr>
</tbody>
</table>

The first pair that was evaluated was the Introvert/Extrovert trait. The respondents were evenly divided in the pairing, 13 were found to be Introverts and 14 were Extroverts. The second pair to be evaluated was not as evenly divided as the first. There were 12 iNtuitive respondents and 15 Sensing ones. The third pair had an even greater variance between traits with the Thinking trait having 16 respondents and the Feeling trait only 11. The greatest difference is seen in the last pairing however. The Judging respondents were found to number 18 and the Perceiving only 9. Figure 1 represents this data in graphical form for
ease of review.

The surveys were also evaluated as to how they represented the 16 personality types. Figure 2 represents the distribution of the 16 personality types. One personality type, ESTJ, had twice as many respondents as any of the other 15 types. Two personality types (ISTP and ENFJ) were not represented by any of the surveys in this data set.

Findings by Learning Style

The data was also reviewed according to the four Learning Styles of the Learning Style Inventory. Ten of the survey respondents were found to fit in the Accomodator Learning Style category, making it the largest category. The Converger category was the second largest with nine respondents in it. The Assimilator category was the second smallest category with five. The Diverger category had the smallest number of respondents with only three. Figure 3 represents this data in graphical form for ease of review.
Trait Data Analysis
Figure 1

Number of Responses

- Introvert
- Intuitive
- Thinking
- Judging

Extrovert
Sensing
Feeling
Perceiving
Learning Style Types

Figure 3

- Assimilator: 19%
- Diverger: 11%
- Converger: 33%
- Accommodator: 37%
Findings by Combined Data

The personality data and the learning style data was then combined to determine what, if any, trends were present in the data. The personality types were plotted against the learning styles. The intent was to determine a trend of a particular personality type or trait being directly correlated to a learning style. Figure 4 represents the combined data of the personality types and personality styles.

The following table shows which learning styles were present in each of the four learning style categories.

<table>
<thead>
<tr>
<th>Diverger</th>
<th>Accomodator</th>
<th>Assimilator</th>
<th>Converger</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ISTJ</td>
<td>• ESFP</td>
<td>• ENFP</td>
<td>• ENTJ</td>
</tr>
<tr>
<td>• ESFJ</td>
<td>• ENTJ</td>
<td>• ESTJ</td>
<td>• ENTJ</td>
</tr>
<tr>
<td>• ESTP</td>
<td>• ESTJ</td>
<td>• ESTJ</td>
<td>• ENTP</td>
</tr>
<tr>
<td></td>
<td>• INFJ</td>
<td>• ESTP</td>
<td>• ESTJ</td>
</tr>
<tr>
<td></td>
<td>• ISFJ</td>
<td>• INFJ</td>
<td>• ESTJ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• INFP</td>
<td>• INFJ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• INTJ</td>
<td>• INTP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• INTJ</td>
<td>• ISFP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ISFJ</td>
<td>• ISTJ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ISFP</td>
<td></td>
</tr>
</tbody>
</table>

Close analysis of the combined data showed that no one personality type was dominant in any of the learning styles and vice versa. The data did show that there was a large portion of respondents that fell into the categories of Assimilator and Converger, however.
Since the data can only be viewed as attributes, the calculation of regression analysis will prove of no value. The potential results obtained have no significance toward determining a correlation or relationship for a statistical analysis. To obtain a more indepth review of the personality traits, refer to the Myers & McCaulley (1985) text, *A Guide to the Development and Use of the MBTI*. This text will prove the basis for assumptions on each individual trait and/or style.
CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was designed to determine what relationship exists between an individual’s personality type and their learning style. An increased understanding of an individual’s preferred method of learning could help both the student and the educator make the most of the learning that is taking place.

The purpose for this study relates to the shortcomings of education in general in the United States that was reported by the National Commission of Excellence in Education (1983). It was reported that educational performance had fallen drastically. This study was proposed as a tool that could, if successful, increase the effectiveness of instruction.

Students that have a good understanding of themselves and their learning style could then take a more active and responsible role in the education they receive. They could find situations that allow them to experience new information in a way that is most meaningful to them.

Educators will need to have an understanding of the different learning styles possible in any class. With that knowledge they will also need to know the learning styles preferred by their students. To be most effective they will need to combine this knowledge when designing learning situations for their students.

In order to accomplish the goal of determining what relationship exists, a
review of existing literature was needed. This review covered the topics of personality and learning.

Several typologies were discussed to give a general understanding of the study of personalities and its history. This was also to show that the Keirsey Sorter (the specific personality typology that was utilized in this study) is very similar to others that exist. It is based upon the Myers-Briggs Type Inventory exclusively and that in turn is based upon C.G. Jung’s work with personalities.

Several learning style theories were discussed briefly to show the broad spectrum on which learning can be viewed. The Learning Type Inventory (the learning style assessment used in this study) was discussed in detail for the purposes of understanding the results of this study.

To collect data for this study, a survey of personality and learning styles were sent to 45 individuals, 27 individuals responded. These individuals were known by the researcher and assistants. Each person was of an adult age.

The data was then collected and analyzed by the researcher to determine if any patterns were evident. These patterns would suggest relationships that were present between personality and learning styles.

Conclusions

The surveys did not indicate that there were any fixed relationships present between personality and learning styles. There appear to be some trends evident but no one personality type or trait can be said to prefer one style of learning.

A possible explanation for this lack of evidence to support this study can
be found in the educational history of both the students and the educational system. With 56% of the respondents being 30 years of age or older, that would result in a majority of the survey respondents having attended school between 1945 and 1972. The educational institutions and instructors from before the middle 1980s were primarily ignorant of the differences in learning styles that students would have and therefore did not use them. Classes were held in one style, primarily lecture (auditory), and students were not encouraged to work in teams or groups. Those who were learning best through lecture and auditory means were doing so due to coincidence not intelligence necessarily.

For those students for whom the lecture style was not the preferred method of learning, this was a painful time. It is the opinion of this researcher that the surveys show only that those students who succeeded in the traditional educational system were able to do so because they had conformed to the method of instruction given. This opinion is supported by the surveys (see Fig. 4) in the respect that an overwhelming majority of respondents, regardless of personality type, fall into the Assimilator and Converger learning style categories. The characteristics of these learning types are very similar to the traditional approach of teaching that students received before the 1980s.

The Assimilator style of learning focuses on creating models and developing theories. Assimilators also learn best by:

- Organizing information
- Building conceptual models
- Testing theories and ideas
- Designing experiments
- Analyzing quantitative data

The Converger style has its strengths in defining and solving problems.
Convergers learn best by:

- Creating new ways of doing things
- Choosing the best solution
- Setting goals
- Making decisions
- Experimenting with new ideas

Both of these learning styles are individualistic in nature and focus on the impersonal world of theories and models. These styles concentrate on being very structured and organized, utilizing an analytical and logical mind. Knowledge is viewed as important because of its potential worth not its practical worth.

Around the 1980s, the educational system in the United States began a re-evaluation process. Educators were taught about the different methods of learning and how to incorporate the needs of the students into their lesson plans. Classes were divided into teams for activities and learning, students were encouraged to take responsibility for their learning and the form that learning took.

This new approach to teaching allowed all students to begin learning in their preferred style. Students that were people oriented, preferred the practical to the theoretical, or were more creative then analytical were not being conditioned to learn in a way foreign to them.

Recommendations

Further research should be done to determine if the educational system had a lasting effect on how the respondents learn. It might show their true learning style versus what they have been conditioned to think is their preferred style.
Gathering this new data could be done in one of two ways. The first is to have younger individuals take the same survey. The educational settings they were exposed to should be different than the original group and more progressive in terms of how the learning is presented.

Comparing the two sets of data will show one of two things. If the new data is as scattered as the original then attempting to match a personality style to a learning style appears not to be possible. However, the new data could show trends and patterns that indicate a useable relationship between the two. This would show that not only would there be a relationship but there would also be strong evidence to show that older students had been forced to learn in a particular way, with lasting results.

The second type of study that could be done to gather supporting data would be longitudinal. It would follow a group of individuals through their educational career. The same surveys could be given to them every few years. The results should stay the same from year to year. This would prove that the educational system has improved and is encouraging students to learn in the manner they prefer. It might also indicate where possible relationships between personality and learning style exist.

If, throughout the years, there was a change in the way students preferred to learn this result might indicate that the educational system had not improved greatly. It might also indicate that individuals go through a personal growth that changes their method of learning throughout their life. This idea would promote an entirely new area for research.
REFERENCE LIST


APPENDIX A

SURVEY QUESTIONS
Thank you for taking the time to complete this survey. You will be asked to complete 2 sets of questions. The first set deals with your preferred style of learning new information. The second set deals with your personality type.

**SECTION ONE**

The following 12 statements pertain to your style of learning. Each statement has four endings. Rank the endings for each statement according to how well you think each one fits how you would go about learning something.

Using the spaces provided, rank the statement endings: “4” for the ending that describes you best, down to a “1” for the ending that seems least like you. (Please do not make ties.)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Ending 1</th>
<th>Ending 2</th>
<th>Ending 3</th>
<th>Ending 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I learn I like to:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>2. I learn best when I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>3. When I am learning I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>4. I learn by:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>5. When I learn I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>6. When I am learning I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>7. I learn best from:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>8. When I learn I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>9. I learn best when I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>10. When I am learning I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>11. When I learn I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>12. I learn best when I:</td>
<td>_</td>
<td>_</td>
<td>_</td>
<td>_</td>
</tr>
</tbody>
</table>
SECTION TWO

The following 42 statements pertain to your personality style. Each statement has two endings. Select the statement ending that best applies to you. Circle that ending.

1. At a party do you
   (A) interact with many, including strangers  (B) interact with a few, known to you

2. Are you more
   (A) realistic than speculative  (B) speculative than realistic

3. Is it worse to
   (A) have your "head in the clouds"  (B) be "in a rut"

4. Are you more impressed by
   (A) principles  (B) emotions

5. Are you more drawn toward the
   (A) convincing  (B) touching

6. Do you prefer to work
   (A) to deadlines  (B) to just "whatever"

7. Do you tend to choose
   (A) rather carefully  (B) somewhat impulsively

8. In your social groups do you
   (A) keep abreast of other happenings  (B) get behind on the news

9. In doing ordinary things are you more likely to
   (A) do it the usual way  (B) do it your own way

10. Writers should
    (A) "say what they mean"  (B) express things more by use of analogy

11. Which appeals to you more
    (A) consistency of thought  (B) harmonious human relationships

12. Are you more comfortable in making
    (A) logical judgments  (B) value judgments

13. Do you want things
    (A) settled and decided  (B) unsettled and undecided

14. Would you say you are more
    (A) serious and determined  (B) easy-going

15. In phoning do you
    (A) rarely question that it will all be said  (B) rehearse what you’ll say

16. Facts
    (A) "speak for themselves"  (B) illustrate principles

17. Are visionaries
    (A) somewhat annoying  (B) rather fascinating

18. Are you more often
    (A) a cool-headed person  (B) a warm-hearted person

19. Is it worse to be
    (A) unjust  (B) merciless

20. Should one usually let events occur
    (A) by careful selection and choice  (B) randomly and by chance
21. Do you feel better about (A) having purchased (B) having the option to buy
22. In company do you (A) initiate conversations (B) wait to be approached
23. Common sense is (A) rarely questionable (B) frequently questionable
24. Children often do not (A) make themselves useful enough (B) exercise their fantasy enough
25. In making decisions do you fell comfortable with (A) standards (B) feelings
26. Are you more (A) firm than gentle (B) gentle than firm
27. Which is more admirable (A) the ability to organize and be methodical (B) the ability to adapt and make do
28. Do you put more value on the (A) definite (B) open-minded
29. Do you prefer (A) many friends with brief contact (B) a few friends with more lengthy contact
30. Do you go more by (A) facts (B) principles
31. Are you more interested in (A) production and distribution (B) design and research
32. Which is more of a compliment (A) “There is a very logical person.” (B) “There is a very sentimental person.”
33. Do you value in yourself more that you are (A) unawivering (B) devoted
34. Do you more often prefer the (A) final and unalterable statement (B) tentative and preliminary statement
35. Are you more comfortable (A) after a decision (B) before a decision
36. Do you (A) speak easily and at length to strangers (B) find little to say to strangers
37. Are you more likely to trust your (A) experience (B) hunch
38. Do you feel (A) more practical than ingenious (B) more ingenious than practical
39. Which person should be complimented: one of (A) clear reason (B) strong feelings
40. Are you inclined more to be (A) fair-minded (B) sympathetic
41. Is it preferable mostly to (A) make sure things are arranged (B) just let things happen
42. In relationships should most things be (A) renegotiable (B) random and circumstances
Friday, February 14, 1997

Dear:

As I'm sure you are aware, I have been attending school recently to get a Master's Degree. I am almost through. My last step is to write a Thesis. In keeping with my chosen field of Training, I have chosen to write my Thesis on the relationship between Personality Types and styles of learning. For example: do Introverts learn best in a group discussion or by following directions out of a textbook?

In order to write on this topic I need to have done some original research. Which brings me to my reason for writing to you today. I have enclosed a survey (along with a SASE) that I would like to ask you to fill out and return to me.

The survey is designed to give a rough indication of your personality type according to the Myers-Briggs Type Indicator and your preferred style of learning according to the Learning Style Inventory. By comparing these two pieces of information, I hope to see a positive relationship between these two variables.

When answering the survey questions, please give the first answer that comes to mind. There are no right or wrong answers but I do require complete honesty.

If you have any questions, please feel free to call. Thank you for your time and effort. If you would be interested in reading a synopsis of my findings, please indicate that (along with your name) on the survey when you return it and I will see that you get one.

Sincerely,

Heather Archer