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Application of Multiple Intelligence Theory in the Classroom

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Chapter 1: Introduction

The reason I am interested in the Theory of Multiple Intelligences is both for my own educational growth and to help students in my classroom who do not respond productively to rote memorization and direct instruction. Students who do not retain or understand information presented in this traditional format are often labeled or thought of as incapable, inadequate, or struggling learners; in some cases, causing them to develop a sense of low self-esteem. My intent is to review literature and examine if there is a relationship between a teacher's instructional style and student success. As an educator, I want to use the most effective and efficient methods of teaching to engage my students because student success, motivation, and curiosity are paramount to me. I also believe that by looking at new avenues, methods, and learning styles, we may contribute to student success.

The physical layout of a classroom can be a huge contributing factor to the environment within. By providing a place that is organized, clean, peaceful, and motivating, we encourage those behaviors from the students that will inhabit that space. Overstimulation, disorganization, chaos, or stressful atmosphere can be extremely detrimental to the individual child, as well as the class as a whole. Students need to feel at ease, comfortable, supported, and valued to thrive. The materials can act as resources and support while also contributing to the encouragement of the classroom.

The teacher also contributes to the classroom atmosphere by providing resources, as well as choice and guidance when appropriate. By showing children they are valued, trusted, and respected, they will feel responsible to uphold that view. This is something that comes with time and is not achieved overnight. If students are taught in this manner, they will come to feel comfortable, confident, and embrace their inner curiosity.

A classroom designed according to a Multiple Intelligences (MI) framework classroom supports the approach of choice by allowing children to experience repetition when deemed appropriate. They are given the freedom to practice skills until they are satisfied with their mastery of it. They are given choices and can work at their own speed. When the MI Theory is used correctly, children thrive, become confident, explore, feel safe to try new things, and believe in themselves.

Multiple Intelligences Theory

Gardner (1983) was a student at Harvard University who later became a professor there as well. He earned a Ph.D. in developmental psychology from Harvard and has written numerous articles and books both on the MI Theory and other topics, primarily in the field of psychology. His work there led to his development of his theory of multiple intelligences.

According to Brualdi (1996), people do not learn from just one or two routes of information. He believed that we all have different ways of learning that are independent of each other. This notion was in direct conflict of the standard intelligence theory which states that our intelligence is all related and correlated. Gardner (1983) challenged the traditional views of intelligence and argued there are seven discrete "intelligences" in human beings. Gardner broadly defined intelligence as

> a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture…intelligences are not things that can be seen or counted. Instead, they are potentials—presumably, neural ones—that will or will not be activated, depending upon the values of a particular culture, the opportunities available in that culture, and the personal decisions made by individuals and/or their families, school teachers, and others. (Gardner, 1999, p. 33)

Gardner's (1983) theory was originally intended for the field of psychology but has received a great deal of attention in the field of education. He unknowingly raised questions,

concerns, and ideas in the field of education based upon his theory. Gardner's seven intelligences are:

- bodily-kinesthetic
- interpersonal
- intrapersonal
- linguistic
- logical-mathematical
- musical
- naturalistic (added later)
- spatial

Gardner later added an eighth intelligence which he called naturalist intelligence. As this was a late addition, it will be noted as relevant, yet not included in my research as extensively as it was introduced at a later time.

In 1987, Gardner added the eighth intelligence, which he referred to as "The naturalist" and "The Spiritualist Intelligence" (Scherer, 1999). The idea behind this type of intelligence is the connectedness that one feels with nature and our environment. Some people tend to be more in tune with our natural surroundings and, by addressing that relationship, we are able to understand and reach these type of learners. This may be in ways such as learning in an outdoor setting for specific lessons, to understanding geography and history that has shaped our world. While this is an intelligence that is as valued as the others, there is less information on this as it was added later. It is for this reason that this intelligence is further described in Chapter 2, yet is

not a primary focus of the application of intelligences in the classroom for the purpose of this study.

The need for addressing the ways people learn can be supported with both science and psychology. Brualdi (1996) argued that there is both biological and cultural basis for the multiple intelligences. Neurobiological research indicates that learning is an outcome of the modifications in the synaptic connections between cells. Primary elements of different types of learning are found in particular areas of the brain where corresponding transformations occur. Varying types of learning results in synaptic connections in different areas of the brain…Gardner also argued that culture also plays a large role in the development of the intelligences. All societies value different types of intelligences and the cultural value placed upon the ability to perform certain tasks provides the motivation to become skilled in those areas. Therefore, while particular intelligences might be highly evolved in one culture, those same intelligences might not be as developed in individuals of another (Brualdi, 1996). While many hypothesizes can be supported by one field, the fact that there is evidence of benefits across the board further supports the importance of investigating and implementing this theory.

As an educator I feel that one way we can prepare students for an environment conducive to learning is to offer an orderly, prepared space. The physical space in which students are expected to learn is not often given the attention that it deserves and this, in many instances, can create environments that can be illiterate as in the case of a classroom without literacy displayed on the wall. In these cases, students are the ones who suffer because they do not learn to value and appreciate literacy and therefore see no need to develop their own literacy skills. Another example can be a child who is focused on chaos or distractions in their immediate space cannot focus on elements in their surroundings that may pique their interests. I, as an educator, feel that

in order for learners to be drawn to the materials that are provided, we must first ensure that the classroom space is supportive and conducive to learning.

Teacher and other adults in the classroom must have the proper training to know their role in the child's educational experiences. Although some educators see themselves as the giver of knowledge, those supporters of the Theory of Multiple Intelligences are more careful and see themselves as guides or facilitators. MI supporters recognize that they are there to help children discover resources and support their curiosity in productive ways. In traditional teacher training there is minimal discussion or focus on observations as the main objective is to ensure that students are testing well, "playing nice," and following the rules. Observations can provide invaluable information about the students, atmosphere, and cohesiveness of the environment.

Young students are drawn to the repetition, the intense learning blocks of time, order, and mental concentration. As these are internally ingrained in the young child, it is our job as guides to provide this when possible. When children feel safe, calm, and cared for they are able to concentrate on learning, exploring, and growing. It is our responsibility to provide this type of environment for these children. Many children come from varying home environments that may not be conducive to a sense of peace and belonging, so we must do so while they are in our care. If we can show children we care and want them to succeed, it provides them another layer of security. This will benefit children on many levels and give them what they need to learn.

Ideally, teachers should investigate the efficiency of Theory of Multiple Intelligences in order to accurately implement this theory as it was intended to be used. It must be properly researched, practiced with fidelity, and assessed regularly—and any adjustments need should be examined carefully. It is the responsibility of the teacher or guide (as I also refer to them) to know the materials and their intended purpose. Materials must be accessible and explained to

the learner so that they have the tools needed to succeed. The ideal guide will practice grace, patience, courtesy, manners, and curiosity consistently. They need to provide an environment that is conducive to learning, growing, exploring, and independence. In a school setting that follows this theory there is freedom for the child and freedom within limits. When children feel a sense of choice they take pride and ownership in their work, their learning, and their behavior. Instead of being told what to do, how to do it, and how to act, they are given the choices and will choose the one that best suits their personality, interests, and needs. If what the learner chooses is not beneficial and disturbs the goal indefinitely, then the guide will discuss this with the learner and offer other more productive choices, while still offering the learner some ownership in their learning process.

In my review I also am looking for connections between this theory that was not intended for education, and ways that it can be used in that area. While that may not have been Gardner's (1983) intended purpose, it may have been its applications to education that can revolutionize the way that we see and teach children. There are studies, stories, and experiences that are published to provide examples of how this is being implemented in classrooms around the world and my goal is to find evidence and data that support the contention that the MI approach contributes to education and student success.

Gardner (2008) indicated there are three fundamental components of a school that incorporates the spirit of MI theory:

1. Students are provided the opportunity to engage in experiences across a range of intelligences or domains.
2. Educators know their students well, specifically their strengths and interests.

3. Students have a hand in defining the curriculum (Multiple Intelligence Institute [MII], 2008).

Educators interested in putting this theory into practice must adhere to these broad guidelines. The teacher must also fully educate themselves on his intent with this research to ensure they are properly administered as intended. The most important aspect of bringing this theory into the classroom is having an understanding of the theory and an understanding of its implementation and its implications. Because there is not a prescribed way to implement Gardner's (1983) theory into practice, teachers to a large degree need use their creativity in the implementation of Gardner's theories of multiple intelligence. Like Gardner, I believe some students may manifest some degrees of learning deficiencies, but instead of blaming the learner we should ensure that the delivery of instruction is accomplished in a meaningful way. With his research, Gardner has provided educators with new hope in attempting reaching all students.

Within this starred paper, I explore literature in the field of education and psychology with the purpose of becoming more knowledgeable on the Multiple Intelligence. In Chapter 2, I will provide qualitative and/or quantitative data on the topic of MI. It is the first-hand experiences that will show me most directly what I seek to understand in this paper. As resources I will use the library, educational journals, psychology journals, and internet access.

Purpose and Significance of the Review

There are schools across the nation that base their curriculum on the MI Theory and it is my hope that by studying their methods, instructional styles, assessment techniques, achievements, and research, I will better be able to take a stance on whether this type of instructional delivery is beneficial to students.

Gardner (1983) argued for the importance of mastery in some areas, as opposed to minimal and general knowledge in multiple areas. He made reference to other countries that have embraced the concept of mastery and applied it in an apprenticeship program for students. By serving in an apprenticeship-type program, students are able to really hone their skills and deepen their understanding. Even if an apprentice program is not adopted, he contended that educators need to help students understand why things happened and how they are relevant to the lives of students. Activating background knowledge, making personal and real-world connections, and applying knowledge will help students not only understand the reality of the world, but the reality of their own lives.

In the current culture of American schools there is disconnect between educators dictating what they will teach the students, and the government overriding those decisions and regulating standards and assessments. Due to the large number of topics and sub-topics that are deemed to be imperative to the educational experience, time constraints limit the extent of exploring any topic with real depth. Most teachers will argue that there simply is not time to teach all that is laid out with both state and common core standards. This notion leads many educators to fly through some topics or subjects, not for lack of caring, but for fear of not addressing all the required material.

In this type of learning environment students are usually in their assigned desks, in class sizes ranging from high teens to low 30s, listening to a teacher from the front of the room for hours. While this may be perfectly acceptable to a small percentage of students, the majority of the student population will not have a true understanding of many things being taught. This is due to varying factors such as learning disabilities, low interest, lack of motivation, or inability to process things thoroughly from a primary audio sense. The MI Theory addresses many of these

concerns by allowing students to receive information in numerous ways other than direct instruction. By alternating the delivery method of instruction the teacher increases the likelihood of making connections with more students. Just as not all students learn best by rote memorization, neither do all students learn best by materials or by music. Having a single way of teaching is narrowing the prospective audience considerably, which limits the amount of learning within a classroom. The more teachers are able to be flexible with their instructional style, the more students have a chance of being reached and inspired. While it is not feasible to assume we can teach to all of the intelligences, it is completely reasonable to assume we can teach to more than one.

The Multiple Intelligences Institute reminds interested parties that the MI Theory is not a scripted structure of how to educate our children, but an idea that can be incorporated to varying degrees. The school states that:

> it is a theory of intelligence; it is neither a specific educational method nor approach. Any application of the theory is an *interpretation* of this alternative understanding of intelligence, in the same manner that certain current pedagogical approaches are associated with more traditional views of intelligence…..three are educational practices that align with MI Theory and others that contradict MI Theory….an authentic MI school-one that operates *in the spirit* of MI Theory-uses the theory, the specific intelligences, and key features of the theory to guide an intelligence-rich and individualized education for all students. (MII, 2008)

As this theory was not intended for the educational field, it was not written as a prescribed way of teaching. There is no curriculum that is solely based upon the MI Theory that also addresses the standards that most public schools must adhere to. It is by trial and error that pilot schools are slowly incorporating these ideas, albeit informally at times, to gauge their results and determine if this is a feasible method of teaching today's youth.

Research Question

As to the reason of why I have selected this topic, I can say that I was intrigued to find out "How has the Multiple Intelligence Theory been applied in educational settings?" Having started my primary question for the benefit of my readers, I feel the need to define the following terms.

Definition of Terms

- Apprenticeship: a system of training a new generation of practitioners of a structured competency in a basic set of skills (Region/Country, 2016).
- Assessment: the evaluation or estimation of the nature, quality, or ability of someone or something (Region/Country, 2016).
- Bodily-kinesthetic: control of one's bodily motions and the capacity to handle objects skillfully (Gardner, 1989)
- Existential: spiritual or religious intelligence (Gardner, 1989)
- Howard Gardner: Howard Earl Gardner (born July 11, 1943) is an American developmental psychologist. Gardner has written hundreds of research articles (https://en.wikipedia.org/wiki/Howard_Gardner - cite_note-go.galegroup.com-3 and 30 books that have been translated into more than 30 languages. He is best known for his theory of multiple intelligences, as outlined in his 1983 book *Frames of Mind: The Theory of Multiple Intelligences* (Gardner, 1983)
- Interpersonal: interactions with others (Gardner, 1989)
- Intrapersonal: introspective and self-reflective capacities (Gardner, 1989)

- Logical-mathematical: having to do with logic, abstractions, reasoning, numbers, and critical thinking (Gardner, 1989)
- Multiple Intelligences: seven described areas in which we learn as described by Howard Gardner originally in his book *Frames of Mind* (Gardner, 1989)
- Musical: rhythmic and harmonic-sensitivity to sounds, rhythms, tones, and musical-rhythm (Gardner, 1989)
- Naturalistic: nurturing relating information to one's natural surroundings (Gardner, 1989)
- Verbal-linguistic: displaying a facility with words and languages (Gardner, 1989)
- Visual-spatial: deals with spatial judgment and the ability to visualize with the mind's eye (Gardner, 1989)

Chapter 2: Review of the Literature

Multiple Intelligences

Gardner challenged the traditional views of intelligence and argued for the existence of discrete intelligences in human beings. Ultimately, he described eight types of intelligences: logical-mathematical, verbal-linguistic, musical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist/spiritualist (Scherer, 1999). The following explanations and examples of these intelligences are from the article "Multiple Intelligences: Digging Deeper:"

> *Bodily-kinesthetic* is crucial for surgeons, athletes, mimes, choreographers, and directors. This helps one retain information when it is associated with an activity, for example dance, acting, and sports. Relating what one is trying to learn to one of these activities will help retain information and gain understanding. ("Multiple Intelligences: Digging Deeper," 2009)

Bodily-kinesthetic intelligence is about much more than physically moving, it is about the learning that is associated with it. While people may be skilled in athletic areas, they may not necessarily be driven to learn in this capacity; it is the connection between success and learning that determine if this is a well-honed intelligence.

*Interpersonal intelli*gence is about social interaction and understanding the people around us and their motives, emotions, perspectives, and moods. This is important in managing relationships, understanding situations, and negotiating conflict. It is especially applicable in careers that require insight and sensitivity to what someone else is thinking or feeling, such as teaching, psychology, or sales.

This intelligence is prevalent in people that possess a deep sense of empathy and ability to read the emotions of those around them. They are in tune with how people react to their environment and sensitive to their response.

Intrapersonal intelligence has been said to be the road to achievement, learning, and personal satisfaction. It is about being connected to who you are and how you feel, and knowing your own limits and abilities. Intrapersonal intelligence is involved in making decisions and setting goals for yourself, self-management, and self-reflection.

To have this type of intelligence you are less likely to be influenced by outside stimulus and influence, as you have a strong sense of self. Those that have strong intrapersonal skills are usually confident in at least some areas and decisive in their decision-making abilities.

Logical-mathematical intelligence is about understanding complex problems and conceptualizing relationships between symbols, processes, and actions. This type of intelligence asks questions, finds solutions, and reflects on the problem-solving process.

There is a lot of misconceptions regarding this type of intelligence as it does not solely relate to the ability to solve traditional math problems. The type of thinking required to be successful in math can be applied to other subject areas as well as in different methods. These types of learners like to problem-solve and find connections whenever possible.

Musical intelligence is associated with enjoying music, singing, making music, and playing an instrument. It involves sensitivity to sounds as well as the emotions music conveys.

There are many people that may have a deep passion for music, yet do not have the skill typically associated with this type of personality. To be intelligent in this type of learning you need not be an accomplished vocalist or instrumental genius, you just need to have synoptic connections when engaging in musical activities.

Naturalistic learning is about understanding the patterns of living things and applying scientific reasoning to the world. Naturalistic intelligence is particularly applicable in careers such as that of a farmer, naturalist, animal behaviorist, and scientist.

To make connections to natural parts of our world, one need not only rely on science and agriculture type topics. Those that are drawn to this type of intelligence can take every day materials, items, and encounters and relate them to their place in the natural world.

Verbal-linguistic intelligence—along with logical-mathematical intelligence—is often associated with doing well in school. It involves the ability to use words effectively for reading, writing, listening, and speaking. The poet has been described as the epitome of verbal-linguistic intelligence.

Those that prefer to engage in public speaking, debate type activities, or taking leadership type roles are often strong in verbal-linguistic intelligence.

Visual-spatial intelligence allows one to see and modify things in your mind. This kind of understanding of the visual world—and its relation to physical items—is valuable in solving spatial problems, designing, and doing crafts.

People that are artistic and can restructure items into new uses are typically very strong in visual and spatial areas. This is often very creative types that can see things that the average person does not recognize. The ability to see new purposes for things are very often in this category.

For the purpose of my paper I chose to focus on the first seven intelligences as introduced originally by Gardner in 1983. These were the original focus throughout his research.

Intelligence Testing

The most commonly used intelligence test is the Intelligence Quotient test, or the IQ Test. The IQ test theoretically represents the ratio of mental age to chronological age. This test primarily focuses on "verbal memory and reasoning, numerical reasoning, and appreciation of logical sequences" (Gardner, 1999, p. 5). This score has become interchangeable in the

vocabulary of intelligence and it was thought to be the determining factor in intelligence. If an individual scored low on an IQ test but displayed brilliance in areas such as music, writing, or science, he or she may be possibly be viewed to be of lower intelligence based upon this subjective test. The IQ test has lost popularity through the years, yet it is still the most widely recognized measure of intelligence, the most common way of assessing intelligence is IQ testing (Nagdy, 2016). Worldwide, an IQ score is the most universal language for discussing the "intelligence" of people. While this may not be the most accurate portrayal of one's actual intelligence, it is the combination of familiarity and recognition that this test is still recognized most widely.

Chipongian (2000) is quoted as saying that "there is no direct tie between a scientific theory and a set of educational moves" (Gardner, 1999, p. 15). While he may support the theory being used in school settings, he is not endorsing how specifically it should be used as that was never the original intent. Gardner also warned against "batteries of short tests that claim to measure the intelligences" (Chipongian, 2000, p. 8) as he argued are interest often mistaken for skills. This is noted by supporters of the theory as well as educators. In the same article, Chipongian "cautioned against trying to assess intelligences with anything approaching pinpoint accuracy. Instead she encouraged teachers to be aware of strengths and weaknesses in each student. She explained how an awareness of her students' strengths and weaknesses can help in developing individuals' abilities as these intelligences are not fixed" (p. 7).

Since Gardner's (1983) introduction of the other intelligences, there has been much research, questioning, studying, and exploring each of these individually. As this investigation and implementation progresses, so will the implications of understanding. The notion that we are not bound by our ability in two specific subjects has given new perspective and hope to many

people who were limited by the misconception. When one does not feel successful or confident, they are not as likely to explore ideas and questions. This feeling has inhibited many people as long as time serves. By feeling success in another area, that same person may find their voice and confidence and will to try new things.

Bernard (2009) is considered an authority on Multiple Intelligences and stresses the importance of intelligence-specific materials. By reading his research and studies he clearly indicates that, while he is a supporter of the MI Theory, he is also realistic in the problems accompanying it in an educational setting. For example, he stated:

> no verbal description of a physical activity, no matter how detailed, could accurately test for bodily kinesthetic intelligence and that the 'language' or symbol system of body/kinesthetic intelligence is physical movement itself and thus the test itself must be presented in these terms (e.g., with dance) and suggests that teachers use games and puzzles (i.e., a jigsaw puzzle, a Rubik's cube, riddles, or physical games like "Twister") presented in the language particular to each intelligence, as possible means for assessing an individual's cognitive profile. (Chipongian, 2000, p. 9)

As our understanding of intelligence is broadened, it seems reasonable that the tools to measure will follow as well. Since Gardner's (1983) introduction of the other intelligences there has been much research, questioning, studying, and exploring each of these individually. As this investigation and implementation progresses, the implications of understanding will progress as well. Contrary to the beliefs underlying IQ testing, Gardner asserted that intelligences are not fixed; they are growing and expanding constantly. In his words, "Intelligences are educable; you can get smarter." The MI theory holds that all children can become smarter across all the intelligences, although this does not mean that children should or must excel in all areas. Gardner believed in offering repeated and multiple experiences and in giving children time to build understanding and ability in different domains or areas of intelligence.

Individuals possess unique profiles of intelligences that develop and change over time. While all humans possess all intelligences, each of us also possesses our own array of strengths and preferences…the implications for the classroom, then, are found in both curriculum and assessment, in that we are charged with ensuring that there are opportunities for children (and teachers and parents) to discover, explore, and nurture those strengths and interests, as well as to recognize and build interest and skills in more challenging or less appealing areas (MII, 2008). By recognizing in what areas an individual is strong, they might better be able to strengthen areas of great skill or choose to focus on areas of need. As one has various strengths, they also have the ability to work on weaknesses as well. While they may not have great promise in every type of intelligence, everyone has advancements in some.

Incorporating MI Theory in a Classroom

For further discussion and exploration regarding this topic, I chose to focus on the article written by Barrington (2004). While in his article Barrington focused more on secondary and post-secondary education, I found it very useful in preparing my students to one day enter the next level of educational platforms and I want them to be as prepared as possible. We must not focus only on what is directly in front of us but what lies down the road as well. Barrington focused on the question of whether MI was viewed as useful pedagogical tools for secondary and postsecondary educators.

Multiple workshops were designed for lecturers that addressed the reasoning behind the theory the research support for the theory, and ways it can be implemented in the classroom. Barrington (2004) stated throughout his article that, while this theory has been more embraced in the younger educational fields, it has yet to gain momentum in the older age category.

According to the questionnaire results, 88% of the educators knew little or nothing about this theory, or its implication. Findings indicated participants were overwhelmingly supportive of MI principles. Results revealed almost unanimous agreement that learning would improve if the MI concepts were taken into account. However, participants reported they lacked confidence to correctly integrate this into their classrooms. In order for this to be done effectively and efficiently, the educator must be able to first correctly identify the student's strengths in these fields of intelligence. The majority of these educators who agreed that it would be beneficial did not actually incorporate this into their lesson planning for the lack of knowledge identifying these students (Scherer, 2006).

As a result of these findings it appears that to accurately introduce the MI Theory into curriculum planning the teacher must feel confident in identifying the intelligences that their students possess. Teachers are hard-wired to pre-assess, assess, and post-assess their students and having that data taken away is understandably daunting to some. While some of these teachers may believe in that theory and that it can better reach, serve, and teach their students, they are not likely to implement it if they are not confident that they will do so correctly. Many of the materials, curriculum, and subjects teachers are required to teach come with training, support, and feedback. Having these readily available gives educators a sense of being able to self-assess along the way. When a safety type device such as these resources are taken away, some might feel overwhelmed or confused in how to progress with the new methods.

Gardner (1984) is the co-director of the 9-year Project Spectrum at Harvard University that began in 1984 to investigate MI theory in early education (MII, 2008). Since this project began, there are now hundreds of MI schools in the United States and even more internationally. Teachers at some of these schools received formal training in understanding the intent of these

works and can obtain a certificate in MI Theory. Education is a critical foundation for appropriate classroom implementation. Gardner himself is one of the first to describe the problems with incorporating the MI Theory into the classroom, yet he also is actively seeking varying approaches to improve this. By educating the educators we are also able to better prepare them to incorporate this into their own classroom. While many teachers do this independent of the school, these schools have this theory as the core of their buildings. I was able to research many of these schools to note their progress, views, results, and concerns.

In the past few decades there have been schools open that focus their curriculum primarily on the belief of the MI Theory. Teachers at some of these schools get formal training in understanding the intent of these works and can get a certificate in MI Theory. By educating the educators we are also able to better prepare them of incorporating this into their classroom. While many teachers do this independent of the school, these schools have this theory as the core of their building. The ways in which this would look in a classroom are open to interpretation based upon the classroom, the needs of the students, the understanding of the teacher, and the classroom environment.

Beckman (2008) described a teacher implementing the MI theory in her classroom and how it is visible in multiple areas throughout the day.

> The underlying framework for the use of MI in the classroom is knowing and being aware of these different learning modes and these different ways of viewing children and the ways in which they exhibit intelligence. This needs to be evident in lesson planning as the teacher strives to address multiple aspects in the presentation of a particular concept. For example, when teaching geometric shapes (logical-mathematical) the teacher can demonstrate and talk about the different shapes (linguistic), show and allow the children to feel wooden shapes or form shapes with their bodies (bodily-kinesthetic), children can work in groups (interpersonal) to find these shapes in the environment and share their findings with the class, do a paper and pencil task to identify shapes (intrapersonal) and/or make three-dimensional shapes from straws and clay or from toothpicks and marshmallows (spatial and bodily-kinesthetic), and write a riddle

> (linguistic) for others to guess the shape's name or put the riddle into the form of a tap or song (musical). In this way the concept is represented in a variety of ways which allows for individual differences and provides greater opportunity for learning and success. (p. 2)

As this is one example of the MI Theory being used across varying subjects and intelligences, teachers can adopt this concept as needed to many areas.

The more comfortable with using innovative approaches in the classroom the more the teacher will be able to incorporate this on multiple levels. When an educator is learning to broaden their horizon beyond one subject matter, they are able to branch out to various platforms. By having examples like the aforementioned, one can practice the approach and gauge the results based upon student reaction. Like many things in life, when one becomes more confident, they are often more apt to take chances and try new things.

The variance of schools that are implementing the MI Theory range from private, charter, and public. It may be easier for private and charter schools to implement MI because they do not face the same hurdles as the public schools (state standards, standardized testing, and data reporting). Nonetheless, some public schools have forged ahead with MI implementation. As more is learned about this theory and its effects in school settings, there hopefully will be more instances of this, providing greater insight. Even in settings where it is not possible to directly test each individual intelligence, some believe that if it is being used properly, then the results of all assessments should improve. Ideally, it would be possible to assess each area independently; the idea behind incorporating this into schools is that more information should be able to be absorbed in depth by the student. If they are receiving the same information as they would in a traditional classroom just by a different delivery of instruction, the results should still reflect understanding and growth in the varying approaches.

Resistance Surrounding the MI Theory

Even though the MI theory was originally intended for the field of psychology, it has been applied to the educational field. Gardner (as cited in Gardner & Moran, 2006) discussed how he was driven to reevaluate his findings from an educational standpoint. One of the biggest challenges with incorporating this in modern schools is the question of how to best assess its results. As mentioned previously, Gardner argued that current assessments did not portray a student's true knowledge. It is true that many educators, parents, and scholars agree with this declaration, but there remains the question: How do we find out what students know? What is the better way to assess them if not by standardized testing?

Many teachers, administrators, politicians, and families are not comfortable incorporating a system into schools that does not come with prescribed assessments and measurable results. Even though they may believe in the theory and what it represents, some also rely on data as the sole source of success or failure in the school system. This can range from teachers, administrators, politicians, and families. When looking at public education, there are a lot of invested people who want to ensure that the most effective and efficient methods are being used. This is not a topic of conversation; it is a number on a test that will guide their reasoning and opinion.

In the context of assessment:

> the kinds of assessment Gardner called for, then, are context-dependent. Just as teaching should take into account the various ways children learn, so should assessments be carried out in a way that focuses on individual variation: rather than bringing children to the assessment, as psychometricians have done (often, to be sure, for understandable reasons), took the assessments to the children. (Chipongian, 2000, p. 5)

This has proven to be an obstacle for public schools that are required to implement standardized testing as these tend to measure the primary intelligences of mathematical reasoning and

language. As current assessments do not meet the types of intelligences identified in the MI Theory, they are not measuring the curriculum of a school based upon this theory (Gardner, 2008).

Gardner (2008) is one of the first to describe the problems with incorporating the MI Theory into the classroom, yet he also is actively seeking varying approaches to improving this. From the research at Harvard, Gardner expanded his theory and its effect on the educational setting.

> Project SUMIT (Schools Using Multiple Intelligences Theory) at Project Zero was a national study of schools that implemented MI theory for at least 3 years. It sought to identify, document, and promote effective models of MI application. Project SUMIT researchers identified several 'compass points"' for using MI theory effectively: a supportive culture, teacher readiness, and use of MI to foster high-quality student work. (Baum, Viens, & Blatin, 2005, p. 28)

By having Gardner oversee this project there is an advantage of having its founder interpret the results. While he may not be able to personally attend to this being incorporated in all schools as it grows in popularity, the data and feedback from the pilot programs provides great insight into whether this is being practiced with fidelity and accuracy.

From the Multiple Intelligences Institute there is a multitude of information of MI Theory being implemented in schools across the country. By exploring the experience they have had and written about I was also able to find much information regarding the resistance and concern critics have presented. They stress the importance of understanding that "intelligences work in combination, not isolation. No intelligence works in isolation in the real world. For example, activities in the musical domain require more than just musical intelligence. Take playing an instrument: musical, bodily-kinesthetic and intrapersonal intelligences are all brought to bear in effectively playing the instrument. For the classroom, this implies using the intelligences in the

combinations in which they are used in real work problem-solving. Rather than creating a learning center for each intelligence, it is more authentic to have learning centers based on domains, interest areas, on a project theme, or otherwise organized such that children's intelligences are drawn out and used in combination, in authentic ways (MII, 2008). While many that criticize or are not familiar with the MI Theory, there is confusion of how these intelligences are inter-related. We all possess each of these intelligences, but to differing levels of strength and weakness. We also use them in harmony with each other; it is not using them in isolation. By understanding the depth of each individual intelligence we are better able to see the correlation of them being used simultaneously.

One MI school is based in Georgia and uses learning contracts to assess student growth and progress. This is described by a teacher there as "the learning contract is an activity chart that provides students with options for tackling weekly curriculum. Sometimes a teacher will ask students to complete all the activities; other times, students can select the projects that appeal to them. Students are expected to complete the work at their own pace—hence the word *contract*…through this greater autonomy leads to greater engagement" (Bernard, 2009, p. 2). Even in traditional school programs there has been the use of contracts to help students feel accountable for their role in their education. By having students take ownership and responsibility, they become empowered as well as effective. The range of choice being offered to these students gives them the notion that they are trusted to make the right decisions. In instances such as this when a contract is broken or there is a breakdown in communication, the contract can be referenced as what the agreement was and why. This puts the student in the position of taking an active role in what happened and why as opposed to pointing the blame on someone else.

Campbell (1991) reported that Gardner cited two problems of MI theory in an educational setting. The first problem is that the notion of *learning styles* is not coherent. The second problem that he sees is:

> When researchers have tried to identify learning styles, teach consistently with those styles and examine outcomes, there is not persuasive evidence that the learning style analysis produces more effective outcomes than a 'one size fits all approach.' Of course, the learning style analysis might have been inadequate. Or even if it is on the mark, the fact that one intervention did not work does not mean that the concept of learning styles is fatally flawed; another intervention might have proved effective. Absence of evidence does not prove nonexistence of a phenomenon; it signals to educational researchers: back to the drawing boards. (Strauss, 2013, p. 3)

This becomes problematic in a society that wants to see measurable results, and in a timely manner. Grades, test scores, assignments, and report cards are the measuring tools that parents have become accustomed to using to gauge their student's strengths and weaknesses. To use the MI Theory in a classroom challenges not only teachers to completely change the methods in which they teach, but also parents and community members to reconsider the data (or lack thereof) to track progress along the way. To undertake this type of overhaul requires a great amount of trust both in the teacher and the MI Theory, which many people are not familiar with. To challenge the way we think about intelligence, the way we teach our youth and the way we assess their progress is a giant phenomenon. This does not mean it is unsurmountable, yet it does solidify the fact that this is no small movement.

When discussing what Gardner (1999) referred to as the "perils" of the assessment process in an educational setting he warned against the batteries of short tests that claim to measure the intelligences. In such tests, he argued that interests are often mistaken for skills. Gardner also pointed out both a potential benefit and a drawback of identifying one's current "intelligences profile;" although knowing one's strengths and weaknesses can be helpful and

provide a way for people to engage in personal reflection, which can be productive. It can also lend people permission to set limits on themselves and others—both consciously and unconsciously (Chipongian, 2000). This further supports the notion that this theory must be fully understood by educators to properly incorporate it into their classroom and curriculum planning. While there are numerous types of intelligences, we must be careful to not confuse these with interests which can overlap significantly if not properly assessed.

In any given area that a person shows great skill or talent they are often prone to have positive feelings about that area. When that feeling persists with the positive results of participating in that activity/subject/sport, etc., the person is significantly more inclined to want to continue. This shows an overlap of interest and skill; while one fuels the other, they both can be improved upon and more heavily invested in due to the feelings associated with it. This also can have a negative draw back when one experiences failure or struggles in trying something new. While this may prevent them from pursuing any further involvement which in turn will retard any growth or improvement.

In order to research this further, the author examined three separate settings that not only used the MI Theory but devised assessments regarding them. One school "has developed a series of modules, or domain projects, that serve the goals of both curriculum and assessments. These projects are presented and videotaped for subsequent study and analysis" (Scott, 2003, p. 169). It goes on to say that "Among the dimensions under consideration are project conceptualization, effectiveness of presentation, technical quality of project, and originality, as well as evidence for cooperative efforts and distinctive individual features" (Scherer, 2006). Having choice of ways to assess the MI Theory gives the teacher freedom to try ones and determine which the best fit for their unique circumstance is. This can be seen both as a

drawback in that there is no scripted guide to follow, and an advantage in the freedom it allows. By creating a portfolio of works, students are able to show their strengths in many fields, not just mathematical and linguistic. Although this is more time consuming, it also provides a more accurate picture of a student's strengths and weaknesses

From a school that based their curriculum on the MI theory, an article was released on their findings titled "Multiple Intelligences in the Classroom" by Campbell (1991). It is through research such as this that we get a clearer perspective on the strengths, weaknesses, and progress of this theory being put into practice. At this school

> a Classroom Climate Survey was administered numerous times during the year and the research data revealed that the students develop increased responsibility, self-direction and independence over the course of the year, discipline problems were significantly reduced, all students developed and applied new skills, cooperative learning skills improved in all students and that academic achievement improved. (p. 12)

This gives feedback directly from a school that is incorporating the MI Theory among more than just the academic results. By taking into consideration the atmosphere, emotional development and student attitudes, there is a broader perspective on the results of the MI Theory in the classroom.

Figure 1 provides an example of assessment used at a school located in Missouri. This is what the teachers currently use as a progress report, as opposed to the more traditional ones that use a letter grade for each subject or topic within a subject. This is the first page of the progress report that addresses one of the intelligences; they all are covered and assessed in this format. This is an innovative way to show parents, students, administrators, and the community of that demonstrate MI in practice. Even though this may not be the most precise way to show student growth and understanding, it is one possible solution—or at least a prototype to use as inspiration for educators personalizing their own version.

NEW CITY SCHOOL • 5209 Waterman Avenue • St. Louis, MO 63108

6th Grade PROGRESS REPORT

Name

Attendance: Absent _____ Tardy _____

MD = Meeting Developmental Expectations

= Needs Added Attention

INTRAPERSONAL DEVELOPMENT
Can self-assess; understands and shares own feelings

		Reporting Period:	1	2	3
I.	CONFIDENCE				
	• Is comfortable taking a position different from the peer group				
	• Engages in appropriate risk-taking behaviors				
	• Is comfortable in both leader and follower roles				
	• Copes with frustrations and failures				
	• Demonstrates a positive and accurate self-concept				
II.	MOTIVATION				
	• Demonstrates internal motivation				
	• Is actively involved in the learning process				
	• Shows curiosity				
	• Shows tenacity				
	• Exhibits creativity				
III.	PROBLEM SOLVING				
	• Shows good judgment				
	• Asks for help when needed				
	• Can generate possible hypotheses and solutions				
	• Shows perseverance in solving problems				
	• Accepts and learns from feedback				
	RESPONSIBILITY				
	• Accepts responsibility for own actions, practices self-control				
	• Accepts responsibility for materials and belongings				
	• Handles transitions and changes well				
	• Accepts limits in work and play situations				
	• Uses an appropriate sense of humor				
	EFFORT AND WORK HABITS				
	• Participates in activities and discussions				
	• Works through assignments and activities carefully and thoroughly				
	• Keeps notebook, desk, and locker/cubby organized				
	• Completes homework assignments on time				
	• Has age-appropriate attention span				
	• Works independently				
	• Follows written and oral directions				
	• Listens attentively				
	• Proofreads carefully				
	• Uses time effectively				

Figure 1: 6th Grade Progress Report

Another wisely used form of assessing in an MI school is the portfolio. This is a cumulative assessment that covers a student's work in numerous areas, both formally and informally. Although this can be time consuming, it also offers a closer look at what students are doing in their daily school day. Having the combination of teacher observations as well as student work samples can give parents a deeper understanding of how successful the MI Theory is as an educational model for their child.

The benefit of changing the assessment to match the instructional style in these schools is that more is learned about these children. Standardized testing does not come without concerns or problems, just as the portfolios currently being used in MI schools do not as well. However, both measures provide insight, measurable data, and background for the teacher to gauge how to best help that student.

> For some, assessment involves informal or formal observations at learning centers, or specially designed performance assessments. Assessments take place during projects or other activities, or are themselves special events, such as presentations or exhibitions. Information culled from assessments is not only reported but also put to several uses: to build on student strengths in subsequent instruction and curriculum, to bridge to student weaknesses, to assign or group children in enrichment groups or for projects, and to celebrate student talent. Assessment should be multimodal, tapping not only one context but several. (Baum et al., 2005, p. 24)

By educating all invested in an MI based school on the assessments used, the understanding provides a greater likelihood for support. People are not keen on supporting something that they do not understand, and by breaking down this barrier, more resistance may be countered.

Suggested Solutions

Brualdi (1996) noted what he considers the four factors in educational reform that must be addressed for success as *assessment*—unless one is able to assess the learning that takes place in different domains, and by different cognitive processes, even superior curricular innovations

are destined to remain unutilized. He then stated *curriculum* as far too much of what is taught today is included primarily for historical reasons. Even teachers, not to mention students, often cannot explain why a certain topic needs to be covered in school. *Teacher education* is considered by Gardner to be the third factor as while most teacher education institutions make an honest effort to produce teaching candidates of high quality; these institutions have not been at the forefront of efforts at educational improvement. Too often they are weighed down by students of indifferent quality, and by excessive—and often counterproductive-requirements which surround training and certification. The last factor Gardner noted is *community participation* as in the past Americans have been content to place most educational burdens on the school; this is no longer a viable option. The increasing cognitive demands of schooling, the severe problems in our society today, and the need for support of students which extends well beyond the 9-3 period each day, all make it essential that other individuals and institutions contribute to the educational process (Campbell, 1991). By addressing these four areas sought by Gardner to be remedied, we are able to counter opposition from the most direct sources.

The resistance surrounding assessment is reliant on the individual schools' obligation to standardized testing. A public charter school may have greater freedom in this regard as they often are not required to follow the same guidelines as a traditional school. Even in a traditional setting, however, this can be addressed by incorporating assessments that measure the intelligences that are addressed specifically. While these are in their infancy there is constant progress and growth in teachers creating and acquiring assessments that can meet the needs of both MI Theory and state requirements.

Curriculum difficulties can be addressed by the classroom teachers as they strive to take the curriculum they are mandated to use and change areas to address the multiple intelligences.

As each intelligence can be stimulated in most subjects this should not be an issue if the teacher is able to be flexible in their approach of presenting the material.

Teacher education is paramount in the success of MI Theory being implemented in schools successfully. As with any program, if it is not used accurately, it cannot be properly assessed as being a success or a failure. By ensuring that teachers are given the tools to research the theory, materials to support it, resources to communicate with other MI teachers, and training to implement it, there is greater chance of this being a positive experience for both the teacher and the classroom.

Community participation is mandatory in that they must have at least a basic understanding of what is being changed and why. While the local community need not get formal training on MI Theory, they must be in the conversation of what it is, the pros and cons of implementing it, and how it will change the way students learn and are assessed. Without the support of the community there is the chance of resistance when confusion abounds. Whenever making a drastic change in the education of students, it is imperative that parents and community members are included in that decision, process, and progress.

Benefits of MI beyond the Classroom

Gardner (1983) stated that in current education in our country students are just "going through the motions.". He asserted that students are learning to obtain a grade, earn a reward, and/or pass a test and are not reaching a deeper level of understanding on the topics presented. It is with this notion that many educators sought an upheaval in the way we teach and inspire our students. While the grade may be the short term reward, many educators see the value in deeper understanding, true passion for learning, life-long goals and applying knowledge to every day situations.

Gardner (1983) compared educational systems and results from different countries, school settings, and communities to research his belief regarding this. He made references to China and their apprenticeship approach and the greater relevance to these experiences. In this approach, students become masters and they are assessed and tested all the time leading them to the ability to demonstrate genuine understanding. He believes that Western cultures try to cover too many areas with minimal knowledge as opposed to fewer topics with greater understanding. By having such a wide range of comparable areas he is able to say with relative certainty what is and is not effective in the school setting and life beyond school.

The intelligences that we all possess are invaluable in life, both in the classroom and beyond. The strengths one possesses drives their future employment, interests, hobbies, and passions. By identifying what these strengths are, opens doors that may have not been acknowledged previously. Every skill that is discovered increases confidence, broadens horizons, and provides opportunity.

Chapter 3: Response and Recommendations

The reason that I have always wanted to become a teacher is that I have a genuine interest in children and their ability to reach their own potential if they are given a safe environment in which to do so. I believe that children must feel free explore their curiosity, free to express their emotions without fear of ridicule, and free to be accepted as they are. If children feel safe, protected, and cared about, the sky is the limit with what they are capable of doing. Children who struggle in math need not carry a cloak of shame, but find pride in an area in which they are comfortable and successful; the arts or simply another subject. A student who struggles with the conventional subjects still has many attributes that must be recognized and appreciated. Being a good friend, student, child, and person is a very important trait that is often overshadowed by academic performance. While it will be my goal to help each child academically as much as possible, I also feel it is my goal to help each child emotionally to find their inner strength to continue to grow and achieve great things long after they are under my care.

While I still believe many of these notions strongly, I now feel that I will be better equipped to help children grow as I had envisioned. For the first time since becoming an educator, I see my role more as an observer than as a source of information. I have realized that to help the children learn I must first learn from them. I must first know and understand the child and their interests and motivations to best find ways to encourage their curiosity and drive. It is this initial investment in the child that provides the insight needed to truly understand what drives, challenges, and motivates them. As I strive to help them discover their strengths and skills, I must also allow them to teach me about their preferences and passions. It is through the combination of these traits that I will best be able to help guide the child while also incorporating their unique interests as well.

The MI Theory is being more widely acknowledged, accepted, and tried with each passing day and I believe that this will continue to manifest in our lifetime. Even those who oppose it surely do not believe that students, children, adults, or any human being all learn the same? Each person is so uniquely different in their strengths, interests, backgrounds, aspirations, and goals.

From the perspective of a teacher, I recommend action research as a tool due to its ground-root research. By approaching this new educational method, educators are actively seeking to improve on problems or gaps that they see in education and taking the initiative to improve upon such. This also leads to a team effort in implementing this theory into an educational setting and opens the communication among colleagues of strengths and weaknesses witnessed by its inception. When a group is actively pursuing, reviewing, and analyzing observations along the way, the results are shared and dissected collaboratively. By having the support and cohesion of colleagues simultaneously initiating this approach, the outliers can be identified and the results can be viewed across varying degrees of variables.

In an ideal MI school setting there is freedom for the child, freedom within limits. When a child feels a sense of choice they take pride and ownership in their work, their learning, and their behavior. Instead of being told what to do, how to do it, and how to act, they are given the choices and will choose the one that best suits their personality, interests, and needs. If their choices are not beneficial and disturb the goal indefinitely, then the guide will discuss this with the child and offer other choices, not redirect them to their choices.

In the current culture of high-stakes testing in American schools, students are usually assigned desks and are conditioned to listen to a teacher from the front of the room as passive learners for hours. Although this may be perfectly acceptable for a small percentage of students,

the majority of the student population will not have an understanding of what is being taught. This is due to varying factors such as learning disabilities, low interest, lack of motivation, or information processing difficulties. MI Theory addresses many of these concerns by allowing students to receive information in other formats besides the traditional direct instruction format. By alternating the delivery method of instruction, teachers increase the likelihood of making connections with more students and thus create an environment that is more inclusive than your traditional classroom. Just as not all students learn by rote memorization most efficiently, neither do all students learn best by materials or by music. Having a single way of teaching is narrowing the prospective audience considerably, which limits the amount of learning within a classroom. The more teachers are able to be flexible with their instructional style, the more students can be reached and can become active participants in their own learning process. While it is not feasible to assume we can teach to each of the intelligences, it is completely reasonable to assume we can teach to more than one.

When first being introduced to the MI Theory in an educational setting many people are baffled by the concept of not having rewards or punishments integrated into classroom management techniques. While these have been used prevalently in traditional schools for many years with varying degrees of success, the theory of multiple intelligences support that these were not the most effective way to teach children long term. When children are given a reward as motivation, they can be conditioned to seek this in all areas of life and rely on extrinsic motivation for all things. The danger in this is when a definitive reward is not offered, some children (and later adults) will not have the motivation to succeed as they do not see the value.

This is also true with discipline or punishments in a traditional setting. The majority of public schools in America have some type of negative behavior plan that usually results in

punishment. People that went through these types of school systems are very familiar with the levels of punishments; while they may differ slightly, the levels are pretty universal. A student that is not conforming or following the rules or expectations will generally be warned, talked to, have a phone call/email to home, a visit with the principal, detention, and/or suspension. These all will vary depending on the type of offense and the pattern of behavior, but statistically is along these measures. When these expected and apparently comfortable punishments and rewards are removed from a classroom setting, we are left with the question of how to keep order. Many believe that these are the necessary components to harmony and compliance within a classroom, yet the MI Theory uses the pride and success that a student finds within themselves to regulate behaviors and expectations as well.

The eighth intelligence briefly mentioned previously is called the "Naturalist Intelligence." Those that are strongly inclined in this area have a connection with our environment and all that it encompasses. Areas that might pique the interested of this type of learner consist of animal categories, plant classification, natural patterns, and history of living things, evolution, and so forth. While these are not typical focuses of study in a traditional classroom, these might be slower to be accepted in the educational inclusion of the MI Theory, yet this does not deem it any less importance as an area of intelligence. As with the other identified intelligences, if one recognizes that this may be an area in which they excel, that person might find a better understanding of their calling in life and their variances of interest. While some specific careers had previously been suggested based upon correlating intelligences, there also are ones that would be a complimentary fit for a person that has a strong naturalist intelligence.

The Naturalist Intelligence is useful as more than choosing a career path; this identification can also contribute to hobbies or activities that one may enjoy. While this primarily is thought of as the things within our natural environment, it also encompasses the larger components such as weather, space, and geography as well. People that are drawn to these topics may benefit from adventures such as camping, hiking, traveling, and museums. While each intelligence is used as a guideline and not a diagnosis of one's every interest, the types of careers, hobbies, and activities will vary from person to person. This eighth identified intelligence is yet another tool to help recognize our individual strengths and weaknesses.

It is very important as an educator to understand how students learn and how they view the process. Helping students recognize a reason for learning is very powerful as it will motivate them to seek out knowledge in other areas as well. If they feel that the lessons are relevant to their lives and meaningful then they are much more likely to apply themselves.

Does a teacher's instructional style correlate with student success when adjusted to consider the multiple intelligences as introduced by Gardner? I believe that it does and the research is showing this more and more. If a teacher is well-educated in the MI Theory, they are better equipped to meet the varying needs of their students. The combination of teacher training, community support, revised assessments, and results through time will prove this as its incorporation grows. As this is still a relatively new concept, there are growing pains, hiccups, and concerns. Yet with all theories, if there is substance and truth behind it, it will succeed eventually.

Currently, Howard Gardner is still with Harvard University and continues to defend and modify his original theory of Multiple Intelligences. Gardner is working with Harvard Project Zero which studies the MI Theory and also where he is the senior director. This group began

with the intent of promoting the education of the arts and has evolved to the studying of intelligences, understanding, and ethics. Gardner is also the co-director of the Good Project which promotes similar studies. While the original theory was introduced over 30 years ago, Gardner continues his research in its inception into an educational setting and its impact in schools that have incorporated this as a basis of their educational approach. He has written numerous books and articles on this theory and in the field of psychology as well.

At Harvard University, where Gardner is currently employed, his theory and ideas have influence beyond his own projects. Gardner has received numerous honors for his findings on this topic and other writings. While he is employed at Harvard, and has been since 1986, he also has received honorary degrees from over 30 other colleges. Gardner is now conducting a large scale study on how to improve the quality of higher education in our time.

Recent research continues to be contradictory on the results of MI Theory, both in an educational setting and as a general idea of profiling intelligence. There are opposing sides of supporters and naysayers, as there are with so many things that are either revolutionary or controversial. This in no way deterred me from further researching this theory; if anything, it further propelled my interests as when there are strong opinions, there usually are results as well. It is ideas such as this that will never be accepted by some, yet embraced by others. Through time, data, results, and attention we will truly see the implications, though it will not be immediate. Gardner, himself, has not let the opposition slow his research; it is possible that it fuels his motivation to support his notion. The amount of information available is rapidly increasing as the theory becomes more widely recognized, from both sides of opinion.

The qualities of a MI classroom that contribute to children acquiring "self-discipline" are many and intertwined. One way that this is supported is the classroom itself and how it is set up. The physical space in a MI classroom is orderly, well thought out, beautiful, and cohesive. This is designed with the child in mind so that they are at ease and peaceful in this environment. Being here promotes tranquility, curiosity, and choice. The guide also contributes to this atmosphere as they are trained to offer choice, resources, and guidance when appropriate. By the guide showing the child that they are valued, trusted, and respected, the child embodies those emotions and feels responsibility to uphold that view. This is something that comes with time and is not achieved overnight, as stated best by the phrase most often used in MI Schools "Nurture the child, know the child, and trust the child" (MII, 2008). The work in this area begins before the children ever enter the classroom, yet extends throughout the entire school year. As every class brings unique personalities, it also brings individual interests, values, and choices. These must be taken into consideration when planning the classroom layout.

The structures that contribute to the development of the will are consistent with these same sources. The MI classroom supports this by allowing children to experience repetition when deemed appropriate. They are given the freedom to practice skills until they are satisfied with their mastery of it. By the choices they have they can work at their own speed.

Where we are currently in the research and development of applying the MI Theory in the classroom is ever evolving. While there are schools that openly use this theory as the basis of their educational beliefs, there are also schools that use it in a more informal approach as well. The schools that use it as part of their identity tend to be more magnet or charter schools and it will be beneficial to track their progress since adopting this as the basis of their form of delivery. The schools that use this as an idea, but not a backbone of their instructional style, will be harder

to gauge as there are more variables involved. It is through organizations such as Project Zero at Harvard that we will be able to have a central base in locating data and statistics of these schools along the way.

In relation to the initial reasoning of developing the theory of Multiple Intelligences, Gardner did not change his reasoning for his beliefs, yet has demonstrated flexibility in its intent. By continuing to conduct his own research on this theory being used in an educational setting he also exhibits the notion that this can be successful in this form. Had Gardner opposed to the educators that adopted this theory for their field there may have been more cause for concern, yet by his support and dedication he appears to promote its unintended new purpose. The theory itself has stayed true to its roots and ideals, yet the evolution of its impact continues to evolve.

We must provide consistency, stability, and predictability for children whenever possible. As we cannot control all of the other forces affecting each child's lives, we can control the atmosphere that we attempt to provide while they are entrusted to us. By doing our best to offer a classroom conducive to learning, respect for their being, a caring nature that is true, and expectations that they can meet we are giving them our best. But as they are always changing and growing, we must do the same. There is no fix all answer to anything in life and we must always seek new approaches for differing situations and circumstances. If we keep an open mind but have a strong base, such as the theory of multiple intelligences, we can be comfortable in knowing that we are educating ourselves to help these children and always looking for new ways to learn as well.

Every child should be recognized, appreciated, acknowledged, and celebrated for who they are. We must give them the tools to discover their interests in an environment conducive to learning. Every child has the right to feel safe, cared about, capable, and special. It is the role of

the educator to provide this environment. The child must feel free to explore, to make mistakes, to grow, to share, and to learn. The educator must be prepared, patient, flexible, and engaged. The classroom must exude respect, interactions, active learning, and a strong sense of community. When these all are in place then real learning can take place, real relationships can form and real community bonds can grow.

The MI Theory is a new approach to education that has the potential to revolutionize the way we deliver instruction as well as how students receive information. Though it may still be in its infancy, even 30 years after its introduction, it should not be discredited. The theory is solid and supported by numerous respected experts in both psychology and education. The conversion of effectively integrating it into education is where we will be able to use this to benefit students. The assessment piece is proving to be providing the largest concern, yet there are solutions being improved upon daily in this regard. As its inception is being monitored, its progress with tracking and data is being improved as well.

I believe that anything in which students gain confidence is a success in itself. A student that consistently does poorly on tests with math and language arts may begin to lose that confidence. A student, or anyone for that manner, who is not confident is less likely to participate, apply the fully, or take risks. If showing a student that performs like this that they may not be strong in the mathematical or linguistic intelligence, but show them other ones where they are strong, may feel better about themself. This also gives them to tools to acknowledge their strengths and apply them when necessary. This I consider a tool because they can take the knowledge with them beyond the classroom to all areas of life. There are many wonderful benefits regarding the MI Theory and I feel that this will only be more recognized the more it is implemented.

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