

RECOGNIZING MULTIPLE INTELLIGENCES IN THE ADULT LEARNER AND
APPLYING TECHNIQUES TO MAXIMIZE THE LEARNING EXPERIENCE

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RECOGNIZING MULTIPLE INTELLIGENCES IN THE ADULT LEARNER AND
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Statement of the Problem

How would one apply the theory of Multiple Intelligences to non-traditional adult learners as a means to create learning experiences that better fit their special concerns and at the same time create an environment that allows them to take more responsibility for their learning?

Methods and Procedures

A review of literature related to research, studies, and related outcomes was conducted. The research was conducted through the Blackhawk Technical College (Janesville, WI) and Karmann libraries (University of Wisconsin-Platteville) utilizing searches conducted via Internet through EBSCO Host with ERIC and Academic Search Elite.

Summary of Results

Approaching adult instruction with a less traditional view creates the opportunity to develop adult learning experiences better fitting their special concerns and at the same time offering an environment that allows adult learners to take more responsibility for their learning. As a result of this research, the following recommendations can be made. Moving toward integrating multiple teaching methods could only result in positive effects. Some of those effects for adult learners would be finding the material more interesting, feeling more comfortable when they know their preferred intelligence would be utilized, and remaining focused and engaged for longer periods of time. Utilizing MI techniques also presents additional opportunities to create a more self-paced environment where adult learners can take greater responsibility for their work.

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CHAPTER ONE

INTRODUCTION

Introductory Statement

Certainly differences of opinion exist when one enters the debate of how individuals learn. Two theories of the nature of intelligence often have fallen into the categories of General Intelligence and Multiple Intelligences (MI). Both theories could debate the flaws of the other and point out the science of the brain that supports their particular perspectives.

The purpose of this paper was not to definitively define which approach was right but rather to look at considering the expansion of teaching methods when dealing with adults. Typically traditional teaching methods have tended to lean toward the general intelligence theory, which from a simplistic view, measures IQ.

This research was intended to introduce the multiple intelligences theory as they might apply to the adult learner; discuss how one might assess learning styles within the classroom, and finally put the techniques into practice.

Dr. Howard Gardner, Harvard Graduate School of Education, 20 years ago developed his theory of multiple intelligences. The Introduction from *Frames of Mind. The Theory of Multiple Intelligences* (1983) summarizes this theory:

In the heyday of the psychometric and behaviorist eras, it was generally believed that intelligence was a single entity that was inherited; and that human beings - initially a blank slate - could be trained to learn anything, provided that it was presented in an appropriate way. Nowadays an increasing number of researchers believe precisely the opposite; that there exists a multitude of intelligences, quite

independent of each other; that each intelligence has its own strengths and constraints; that the mind is far from unencumbered at birth; and that it is unexpectedly difficult to teach things that go against early “naïve” theories that challenge the natural lines of force within an intelligence and its matching domains. (p. xxiii)

To put it simply, he believed that individuals utilize several different types of intelligence, rather than just one.

Gardner originally created a list of seven intelligences, which were viewed as capturing what was normally valued in schools, what was usually associated with the arts, and what was inherent to self. Since the original list of seven intelligences was published (1983), Gardner had done further research and added an eighth to the list, naturalist intelligence. Gardner stated the intelligences usually did not function independently but rather complements each other, often being used simultaneously to solve problems or demonstrate skills.

Assessing the learning styles in the classroom could be accomplished formally or informally. Formal methods often involve having the learner complete a survey in which respondents indicate how closely they identify with the statements. These responses could then be categorized to determine which intelligences were strongest for the individual. The results are also useful for an instructor to assist in determining which intelligences the learner was most apt to benefit. Often these types of surveys could be found on-line and would automatically tally the results at the completion of the assessment.

Instructors could also become familiar with the different intelligences and the type of activities that appeal to those learning styles. Informally, the instructor could then observe

learners and note which types of activities engage them. These would most likely reveal their preferred intelligences.

Putting the MI techniques into practice could be more work than a lecture-based format. Lesson planning would need to be multifaceted in order to engage the different intelligences. It could be useful to utilize various aids or charts to help identify different teaching methods which play to the different styles. In general an instructor needs to mix it up.

A traditional presentation style would be to conduct a lecture while occasionally writing on the blackboard and asking questions about the text or handouts. Shifting to an MI teaching style, a presentation might very well still include a lecture but changes methods often combining techniques in creative ways.

In summary, moving toward integrating multiple teaching methods could only result in positive effects. Some of those effects would be adult learners finding the material more interesting, feeling more comfortable when they know their learning style would be utilized, and remaining focused and engaged for longer periods of time. Utilizing MI techniques also presents additional opportunities to create a more self-paced environment where the adult learners could take greater responsibility for their work.

Statement of the Problem

How would one apply the theory of Multiple Intelligences, which has been widely utilized in K-12 classrooms, to non-traditional adult learners as a means to create learning experiences that would better fit their special concerns and at the same time create an environment that allows them to take more responsibility for their learning? Recognizing multiple intelligences in the adult learner allows an opportunity to deliver the course content in a

variety of means in order to connect with the individual dominant intelligence. Howard Gardner originally identified a list of seven intelligences which has now been cross referenced to different teaching methods. These methods could be deployed to target the individual's preferred or dominate intelligences or create a blended approach to better meet the needs of a diverse group.

Commonly course materials were delivered and subsequently accessed using traditional methods; for example, instructor lectures leading to standardized testing. Understanding that adults learn differently based on multiple intelligences provides opportunities to introduce a variety of teaching modalities to better connect with the individual needs of the student.

Delimitations of the Research

The research was conducted through the Blackhawk Technical College (Janesville, WI) and Karmann libraries (University of Wisconsin-Platteville) over a period of 21 days. Primary searches were conducted via Internet through EBSCO Host with ERIC and Academic Search Elite. Key search topics included "adult education and multiple intelligence," "theory of multiple intelligences," and "Gardner."

Method of Approach

A review of literature related to research, studies, and related outcomes as they apply to recognizing multiple intelligences in the adult learner and applying techniques to maximize the adult learning experience was conducted. The findings were summarized and recommendations made.

Glossary of Terms

Fair Use: Allows limited use of copyrighted material without requiring permission such as use for scholarly review or educational purposes in which no compensation was received.

General Intelligence theory: Traditional method of teaching, which centers primarily on linguistic and mathematical skills and was most frequently associated with IQ testing.

Multiple Intelligence theory: Proposed by Howard Gardner in 1983, to more accurately define the concept of intelligence.

Pedagogies: The term generally refers to strategies of instruction, or a style of instruction.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introducing Multiple Intelligence Theory

The downturn in the economy forced many individuals to rethink their positions in the workforce. Some lost their jobs due to layoffs, others looked at learning new skills in order to move toward more stable careers, and even others went back to the classroom in order to qualify for more secure positions within their companies. Adult learners found opportunities to return by taking advantage of dislocated worker benefits, using education reimbursement programs, or making it a priority to fund the experiences themselves. Whatever the reason and whatever the means that allowed them to be there, community colleges and technical schools saw an explosion of non-traditional adult learners enrolling.

As these adults returned to the classroom, they were frequently filled with anxiety often still carrying with them labels of being a poor student, remembering their struggles with traditional test taking and assessments, and feeling uneasy with standard approaches that centered primarily on linguistic and mathematical skills. It was not uncommon for the returning adult learner to have postponed coming back for extended periods due to these concerns.

How were these students reached? One hypothesis was used was to draw from their experiences and integrate their different intelligences into the learning experience by utilizing the Multiple Intelligences theory approach, which had been embraced primarily in K-12 classrooms, but could also be applied in the post-secondary education experience. The desired outcome would be to create an adult learning experience that would better fit their special concerns and at

the same time create an environment that allowed them to take more responsibility for their learning.

This review of literature was intended to introduce the Multiple Intelligences (MI) theory, outline and address some of the theory's critics, discuss how one might assess the intelligences, and finally report how the techniques might be put into practice especially when relating them to the adult learner.

Summarizing the Theory of Multiple Intelligences

Howard Gardner, Harvard Graduate School of Education, twenty years ago developed the theory of Multiple Intelligences. To look at the evolution of intelligence theories from his perspective, early on it was widely believed that intelligence was inherited and a single trait. Intelligence started as a blank slate that could be taught to learn anything. As theories evolved, researchers began to believe the exact opposite. Instead of a person possessing just a single intelligence, they actually operated from a multitude of intelligences that were independent of each other. Each one of these different intelligences operated from its own set of strengths and constraints that made it difficult to teach things that go against the natural forces within an intelligence (Gardner, 1983, p xiii).

Gardner originally created a list of seven intelligences. It had been viewed that they captured what was normally valued in schools, what was usually associated with the arts, and what was inherent to self. Since the original list of seven intelligences was published, Gardner (1983) had done further research and added an eighth to the list, naturalist intelligence. The eight intelligences Gardner defined were as follows:

1. Logical-Mathematical Intelligence—consists of the ability to detect patterns, reason deductively and think logically. This intelligence is most often associated with scientific and mathematical thinking.
2. Linguistic Intelligence—involves having a mastery of language. This intelligence includes the ability to effectively manipulate language to express oneself rhetorically or poetically. It also allows one to use language as a means to remember information.
3. Spatial Intelligence—gives one the ability to manipulate and create mental images in order to solve problems. This intelligence is not limited to visual domains. Gardner notes that spatial intelligence is also formed in blind children.
4. Musical Intelligence—encompasses the capability to recognize and compose musical pitches, tones, and rhythms. (Auditory functions were required for a person to develop this intelligence in relation to pitch and tone, but it is not needed for the knowledge of rhythm.)
5. Bodily-Kinesthetic Intelligence—is the ability to use one's mental abilities to coordinate one's own bodily movements. This intelligence challenges the popular belief that mental and physical activities were unrelated.
6. Interpersonal Intelligence—ability to notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations, and intentions.
7. Intrapersonal Intelligence—ability to distinguish and identify various personal thoughts and feelings and to use them to understand one's own behavior

8. Naturalist Intelligence—ability to discern similarities and differences and make classifications among the living organisms in one's environment. (Brualdi, 1998)

Gardner stated the intelligences usually did not function independently; but rather, complemented each other often being used simultaneously to solve problems or demonstrate skills. To better understand the different intelligences, it was important to keep in mind the four key points of Multiple Intelligence theory.

1. MI theory was not the kind of theory that determined the one intelligence in which a person functioned. Instead it proposed that each person had all eight intelligences but their capacities varied, functioning together, yet uniquely for each person.
 2. Most individuals were able to develop each intelligence to an adequate level, even a high level, if given proper encouragement and instruction.
 3. No intelligence existed by itself. Intelligences were always interactive with each other and often worked in complex ways. The intelligences could be individually discussed, but needed to be viewed as interactive.
 4. Many ways existed to show intelligence within each category. No specific set of qualities were identified for a given intelligence area. MI theory stressed the diversity of ways people demonstrate their talents within intelligences.
- (Armstrong, 2000, p. 9)

Outlining and Addressing the Theory's Critics

Certainly differences of opinion existed when one entered the debate of how individuals learn. Two theories of the nature of intelligence often fell into the categories of General

Intelligence and Multiple Intelligence. Both theories could debate the flaws of the other and point out the science of the brain that supported each particular perspective.

The purpose of this paper was not to definitively define which approach was right; but rather, to look at considering expanding teaching methods when dealing with adults. Typically, traditional teaching methods tended to lean toward the general intelligence theory, which from a simplistic view, measures IQ. However, even though the aim of the paper was not to lay out a settlement to any of the debates surrounding the theory of Multiple Intelligences, it was important to lay out an overview of what some of the critics concerns were. Since multiple intelligence theory had been widely influential in the reform of school curricula, it became ever more critical to understand its assumptions. In fact in some areas of the world such as England, the MI theory was used widely to back the idea that students had preferred styles that asserted that better progress was made if the individuals could utilize their strengths in their learning than if they had to be dependent on only the traditional instructional approaches, which mainly involved verbal and computational views (White, 2008; Brualdi, 2000).

White (2008) simply asked, “Does the MI theory hold water?” White hypothesized a principle reason for the excitement of MI theory was its rejection of general intelligence associated with IQ testing. “Children who have been seen, or have seen themselves, as dim were recognized to have other strengths. This was an important thought. But it could be true and MI theory false?” (p. 611).

White pointed to the earlier works of Ryle in which he used the examples of the boxer, surgeon, poet, and salesman who engaged in their own operations, applying “their special criteria to the performance of their special tasks” (Ryle, as cited in White, 2008, p. 611). From this,

White pointed out that “there are as many types of human intelligence as there are types of human goal” (White, 2008, p. 611).

White’s concerns with the MI theory were best summed up by a review by Williams who stated “what makes White uneasy was the attempt to regiment or corral the wonderful varieties of human intelligence within a limited number of categories, or within what Gardner refers to as the charmed circle of intelligences” (2000, p. 1).

White had another central concern which was that Gardner’s development of “the intelligences seem to reflect his own value judgments about what kinds of qualities were important. The identification of intelligences appears to be a subjective matter, depending on the particular weightings that Gardner gives to different criteria in different cases” (White, 2008, p. 616, 618).

It was safe to say that White had other concerns that he had published that point to difficulties in the MI theory, yet Williams did well to point out that “White probably underestimates the flexibility of Gardner’s categories in accommodating the intelligences of ordinary life and in affirming these in the classroom” (Williams, 2000, p. 1). However, White did acknowledge that there was an “abundance of evidence that MI theory had been influential in reducing the low self-esteem of pupils who saw themselves as stupid or thick, where this kind of judgment derived from conventional ideas of general intelligence based on IQ. The idea that intelligence was not necessarily tried to prowess in logical, mathematical, and linguistic tasks but could be displayed across a variety of fields was true, but the idea was not by any means original to MI theory” (White, as cited in White, 2008, p. 625).

Another author that had been critical of various intelligence theories, including the theory of Multiple Intelligences, was Waterhouse who was involved in child behavior research at the

College of New Jersey. She spoke to the growing number of articles on the Internet involving the topic of MI which had increased at a rate 10 times the rate of scholarly articles. There was a large amount of discussion surrounding the MI theory within the educational Web sites, forums, and Internet blogs that demonstrated that the theory was popular, but waged concern that it “should be soundly supported by empirical evidence” (Waterhouse, 2006, p. 207).

However the apparent lack of empirical evidence for MI theory had been defended by Chen (2004), arguing that “a theory was not necessarily valuable because it was supported by the results of empirical tests and that intelligence was not a tangible object that could be measured” (p. 22).

Another claim that Chen (2004) made was that MI theory had been validated by its wide range of use in classroom applications. Waterhouse cautioned that the “positive effects might be explained by the novelty of a new method engendered by teacher enthusiasm and student excitement” (Waterhouse, 2006, p. 209). Waterhouse held to her convictions that the lack of empirical evidence and the continuing acceptance of MI theory could be viewed as a form of “educational malpractice” (p. 220). In her words, “excitement and repetition could be better introduced in learning when attended to directly in planning learning activities” and “when these theories were used as a basis for educational practices they were replacing other classroom practices that might be of greater benefit for students” (p. 221).

In responding to Waterhouse (2006), Gardner and Moran (2006) felt that Waterhouse, who did a nice job of reading the available literature on MI, oversimplified the theory and misinterpreted many of their original points. Waterhouse (2006) as well as White (2008) cautioned educators about putting unproven theory into practice.

Gardner and Moran (2006) noted that it had taken millions of dollars and nearly a 100 years for IQ testing to evolve to its current state, and yet it had not created any real direction for how to increase performance or even how to approach classroom instruction. Furthermore, Gardner and Moran (2006) highlighted that “Gardner himself has never put forth an educational recipe growing out of MI theory, at most he has indicated some general implications - individualizing education, approaching topics through multiple entry points – that were consistent with the theory” (p. 229). As far as educators’ deciding what approaches they should utilize in the classroom, Gardner and Moran felt “that it is up to the educators to decide whether ideas derived from, inferred from, or catalyzed from MI theory are useful to them” (p. 229).

On the assertions that Waterhouse (2006) stated that MI theory was not based on empirical findings, Gardner and Moran rebutted the claim by stating “the theory originated entirely from empirical findings combined from hundreds of studies from a variety of disciplines” (p. 227). MI theory was built on a large body of empirical studies in a process Gardner and Moran referred to as synthesis, which was an ongoing process which continued to review and when appropriate integrate further refinements to the theory. “At the most fundamental level... Gardner has been engaged in the synthesizing the empirical finding of others... which was the assembling and making sense of a body of literature” (p. 230).

Gardner and Moran concluded that MI theory would continue to be reviewed by “those who were familiar with the scientific evidence” and “would weigh whether MI theory speaks adequately to the data” (p. 231). However, there would also be “those who are interested in improving the lot of students in schools (who would also) note, formally and informally, whether practices informed by MI theory encourage student engagement and learning” (p. 231). Even the

critics of the theory (White 2008, Waterhouse 2006), noted at some point in their critiques, that educators and students generated a certain excitement within the learning process.

Scientific evidence for or against the theory aside, engaging approaches in the classroom which generated excitement and higher self esteem situations could only help to foster better learning outcomes. As summed up by Bawden and Delisle (2002), who was defending the Multiple Intelligence theory, which was accused of being the death of gifted and talented programs, “It is our obligation to teach these students how to channel their talents into meaningful and productive activities that would prepare them for the challenges of the future. Employers would not ask for their IQ score. They would ask what they can do” (p. 5). This message resonated with most adult learners, especially in a technical college setting, who wanted to be able to translate what they were learning in the classroom to the “real world”.

How to Assess the Intelligences

It could be successfully argued, in order to teach to Multiple Intelligences, that instructors themselves know what their preferred intelligences were. This was important for two reasons. First, instructors tended to teach based on how they learned creating lesson plans using methods in which they themselves felt most comfortable. Secondly, by going through the process of assessing oneself, an individual could become more aware and more accomplished in identifying these preferences in others.

Another benefit instructors had when they were self aware of their preferred intelligences, was they also became more cognizant of the learning methods in which they were less apt to inherently incorporate. Knowing that it was important to address all of the aptitudes

of the adult learner, an instructor might have to get out of the teaching comfort zone and deliver content via methods not normally utilized by that particular instructor.

Assessing the dominant intelligence in the adult learner could be approached either formally or informally. Formal methods often involved having learners complete a survey in which respondents indicated how closely they identified with each statement. Responses were then categorized to determine which intelligences were strongest for the individual. This was also useful for an instructor to assist in determining from which intelligences the adult learner was most apt to benefit from. Often these types of surveys could be found on line and would automatically tally the results at the completion of the assessment.

An added benefit of taking a formal approach was the opportunity to introduce the participant to the basics of Multiple Intelligence theory. This exposure explained the reasoning behind the survey taking and also put the results in a more meaningful context. Successful implementation and involvement of MI methods was increased by involving the adult learner and exposing the reasoning behind the assessment. Greater understanding by the learner tended to lead to greater participation.

Instructors could also become very familiar with the different intelligences and the type of activities which play to those learning styles. Then informally, the instructor could observe the learners and note the types of activities that engaged them, which would most likely reveal their preferred intelligences. Assessing through observation could be particularly useful if interacting with adult groups for especially short periods of time such as in a seminar or workshop setting. It was important for the instructor, or in these types of situations, the facilitator, to note that these “on the fly” assessments might not always be accurate due to limited observed information. It might be more useful to simply remember that MI existed and when

dealing with a group of adult learners to make sure to “mix it up” in order to reach the highest number of participants.

There was no case to be made that formal verses informal assessments were better than the other. It was more the acceptance that greater success could be achieved when the instructor knew the specific aptitudes of learners. Taking this a step further, developing students’ self knowledge in regard to their relative strengths and limitations as learners, lead to increased intrapersonal intelligence, improved success in educational outcomes, and increased efficiency in terms of motivation and work skills (Sellars, 2008, p. 139).

Furthermore, the opportunity for the adult learner to “make meaning of their learning and develop their own strategies for problem solving could have considerable impact on these students’ perceptions of themselves as learners” (Sellars, 2008, p. 139). Learners of all ages, who better understood their preferred intelligences, tended to do better across all subjects (Sellers).

Putting the Techniques into Practice

Putting the MI techniques into practice could be more work than a lecture based format. Lesson planning would need to be multifaceted in order to engage the different intelligences. It could be useful to utilize various aids or charts to help identify different teaching methods which played to the different styles.

A traditional presentation style would be to conduct a lecture while occasionally writing on the blackboard and asking questions about the text or handouts. Shifting to an MI teaching style, a presentation might very well still include a lecture but changed methods, often combining techniques in creative ways.

However, with the flood of technology available, it was becoming more realistic to be able to develop lesson plans that more fully connected with the different intelligences. Computer and Web-based resources allowed open access to materials that frankly were not available as freely in the past. Another door opening aspect was the “Fair Use Act” that allowed instructors to freely use otherwise copyrighted content within the classroom for educational purposes. The Internet resource flood gates were now open to allow both instructors and the learner to experience topics in ways that were tailored to preferred intelligences. Relevant lesson planning could easily incorporate visual/audio samples, music, and a variety of other channels to deliver content. The Internet could also provide a venue for instructors to share creative lesson segments that addressed the broader spectrum of the intelligences or assisted in augmenting part of a lesson plan.

An emphasis on utilizing MI teaching techniques almost inherently provided an avenue for the adult learner to become more technology savvy. Traditional teaching techniques, which rely largely on lecture format, typically did not engage many resources or technology tools. As a result, traditional classrooms did not expose or engage the adult learner with the new educational methods, which were available. Adult learners were more apt to master technology when they utilized it in meaningful and practical ways. This engagement also provided an avenue to help dispel pent up fears an adult learner might have had regarding the expectation for them to interact with technology when returning to the classroom. The “consequences of significant changes in the world might demand that education endeavors were refashioned to stretch the minds of learners in ways that have not been previously considered important educational goals” (Gardner, as cited in Sellars, 2008, p. 140).

Providing experiences to the adult learner, which addressed the different intelligences, created opportunities for them to engage their preferred intelligences, but perhaps in new ways. An adult, who would traditionally have just made a presentation from behind the podium, might now express visual intelligence and learn how to integrate a Powerpoint presentation. Someone who was more musical might partner a song with a movie maker production. This integration of preferred intelligences and technology also provided bridges between adult and younger learners as they partnered on projects and utilized each other as resources.

Bottom line, “the rate of change in today’s society has led to the realization that the model of teaching and learning that evolved to meet the needs of industrial society requires considerable transformation if it was to support the education needs of students today” (Dickinson, 2002, p. 10). Caught up in this discussion was how to equip students with the tools they needed in order to stay competitive in the workplace. One thing was for sure, what constituted effective teaching would need to be continuously evaluated with one eye on the future so that no one was left behind.

In looking at student segments, this future forward focus was especially important to the adult learner who was returning to the classroom often fully expecting to be in a time warp. MI theory was an appropriate approach to deliver content not always playing to the traditional linguistic and mathematical emphasis, but rather to the strengths of the adult learner that often had been identified through their life and work experiences. “Implicit in this discussion is the understanding that students construct knowledge in an individual manner and they would need to have some input into proposed curriculum” (Sellars, 2008, p. 141).

Many of the activities, which would typically have been organized by the instructor, would now be developed by the learners. Even though considerable support would continue to be

given by the instructor, the adult learner “needs to take more initiative in the learning process, in activities that encourage peer interaction, and in decision-making,” (Sellars, 2008, p. 141). This approach to the learning better mimicked the past experiences of the adult learner and utilized more of their identified intelligences. However, in many cases due to almost exclusive use of traditional teaching methods, which adult learners had been exposed to in the past, it was often difficult for learners to redefine their roles. Traditionally teachers taught, students learned. The result was that students were not adequately prepared to play their part in pedagogies that required student and teachers to develop partnerships in the teaching and learning process... making decisions and taking initiative that impacted on their own academic success” (Sellars, 2008, p. 144).

Adult learners needed to be given an atmosphere in which the content could be personally meaningful. Learners who understood their dominant and preferred intelligences could identify individual strategies that would better involve them in activities that stretched their knowledge and intelligences. Allowing adults to make real choices in how they were going to learn while still supporting them, was how instructors were going to be able to enlist these individuals as partners in their learning.

CHAPTER THREE

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Approaching adult instruction with a less traditional view, which has largely been centered on General Intelligence theory and IQ testing, and considering expanding teaching methods to include Multiple Intelligence theory provides avenues to more completely engage the learner. Acknowledging that every learner possesses all eight of the intelligences to some degree and that the intelligences did not function independently but rather actually complement each other (Gardner, 1983) creates the opportunity to develop adult learning experiences better fitting their special concerns and at the same time offering an environment that allows adult learners to take more responsibility for their learning. MI theory asserts that adult learners can make better progress if they can utilize their strengths in their learning than if they had to be dependent on only traditional teaching methods (White 2008).

MI theory was not without its critics (White 2008, Waterhouse 2006) but even they concede that utilizing various MI teaching techniques creates an enthusiasm for both the instructor and the learner. Williams (2000) asserts that there were those who simply underestimate the flexibility of MI theory. Putting aside the debates, engaging approaches that generate excitement and higher self esteem, which were often low for the non-traditional adult learner, leads to situations which could only foster better learning outcomes (Bawden & Delisle, 2002).

However, instructors might have to get out of their comfort zones with the realization that greater understanding of the Multiple Intelligences that exist within their classrooms lead to

greater participation. Assessing the preferred and dominate intelligences of the adult learner could be done formally or informally. The selected method of assessment was often chosen given the situation and potential time constraints.

It was often true that integrating multifaceted lesson planning could be more work than traditional lectures, but the benefits abound. Some of the added benefits include opportunities for adult learners to become more involved with their learning, avenues to potentially become more savvy in terms of technology, and situations to share talents between adult and younger learners to name a few.

A potential downside would be in the acceptance of the adult learner when roles would be possibly redefined as a means to increase their involvement (Sellars). Adult learners were most likely to hold on to their traditional views of how a learning environment should be structured and be less apt to shift responsibilities.

Recommendations

As a result of this research, the following recommendations can be made. Moving toward integrating multiple teaching methods could only result in positive effects. Some of those effects for adult learners would be finding the material more interesting, feeling more comfortable when they know their preferred intelligence would be utilized, and remaining focused and engaged for longer periods of time. Utilizing MI techniques also presents additional opportunities to create a more self-paced environment where adult learners can take greater responsibility for their work.

Gardner made a summary statement that sums up the impetus for this paper:

I do not believe that there was a single royal road to an implementation of MI ideas in the classroom. I have been encouraged and edified by the wide variety of ways in which

educators around the country have made use of my ideas... From my perspective, the essence of the theory was to respect the many differences among people, the multiple variations in the ways that they learn, the several modes by which they can be assessed, and the almost infinite number of ways in which they can leave a mark on the world.

(Armstrong, 2000, p. v-vi)

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