The use of Multiple Intelligence, humor, and technology in the college composition classroom: a practical approach

Katerina Andrioti, Ph.D.

Abstract—Since learning environments online as well as in the traditional college classroom are mostly instructor designed and directed, the drive to devise and implement instructional technologies, strategies, and materials that would address all students’ learning needs is pertinent. The use of humor and the design of instruction for populations who choose to learn at some distance from a traditional classroom present an opportunity to effectively apply Howard Gardner’s Theory of Multiple Intelligences through the general design of course content, the use of specific instructional activities, general communication, and improved participant interaction. Gardner emphasized an individual’s capacity to develop his/her intelligences well beyond biological abilities and regardless of cultural or environmental circumstances. We applied this theory at Briarwood College, Connecticut, USA, in 2003. Our sample included 177 freshmen enrolled in English, Sciences, and Professional courses (such as Occupational Therapy and Psychology). Our research results showed that more students were successful in passing our courses (17% increase) were happier in the classroom not only with the comprehensive instruction but also with teaching methods (96%), and fewer withdrew (12%). As a result, through the use of technology, humor, and Gardner’s paradigm, heightened understanding in students’ learning abilities and perceptions was noted. This type of instruction serves as a fertile ground that nurtures competent learners, in charge of their lives and education.

Index Terms—Distance Learning, E-Learning, Humor, Multiple Intelligences, Howard Gardner, Social Media

I. INTRODUCTION

The “One-Size-Fits-All” outdated instructional model does not apply to our students anymore. According to Walter McKenzie, in fact, many students’ approach to learning requires tools that they do not possess [1]. As the old saying goes, “If the only tool you have is a hammer, everything around you looks like a nail . . . .” Various learning theories confirm that students today have a wide range of intellectual abilities and competencies that cannot be measured or quantified on any standardized test. Clearly, testing measures students’ problem-solving, linguistic, logical-thinking abilities. However, it excludes (especially multiple choice) a large number of students from being successful. That is to say, through current testing methods and procedures, primary, secondary, and higher education institutions practice an exclusive pedagogy that caters to a fairly small number of students whose primary intelligence is either logical/mathematical or verbal/linguistic. However, all-inclusive pedagogy ought to address and accommodate the various intelligences under which the majority of our students operate. Moreover, once this paradigm is coupled with online instruction, through the use of Social Media and humor, the results can be very rewarding for students and faculty alike. Employing humor within the Multiple Intelligence (MI) model can yield a better learning and teaching environment and more successful students; it can further help alleviate job stress, prevent burnout, lower blood pressure, improve blood circulation and boost energy [2]. Additionally, using humor in this sense can increase students’ attention span, diminish anxiety and reduce the threatening nature of a course by changing the tone of the instructional process. That is to say, humor coupled with Gardner’s MI theory is precisely what makes for successful students and happy faculty. Whether this instruction takes place in the traditional classroom, online, in a blended, or a hybrid environment is inconsequential. For according to MI theory, it is vital to utilize all tools available to accommodate students’ learning abilities. As a matter of fact, today consumer experience drives expectations. Clearly, our students have moved from desktop to mobile computing, websites to web experiences, solitary games to participant/group play, from static web content to real-time interaction and collaboration, from telephones to integrated mobile information, and from email to instant video, voice, and text messaging. This is simply an endorsement, a go-ahead of sorts to some of us who are slow to incorporate technology in the classroom. The present study aims to test Howard Gardner’s theory in the traditional or distance learning classroom, so that leaning outcomes are assessed.

II. METHODOLOGY

Indeed, Howard Gardner, a Psychologist and Co-Director of Harvard University’s “Project Zero,” the mission of which is to “understand and enhance learning, thinking, and creativity in the arts, as well as humanistic and scientific disciplines, at the individual and institutional levels,” through extensive research on human intelligence, discovered that human beings have “Multiple Intelligences” [3]. At first, Gardner clearly documented seven intelligences which learners may utilize to gain knowledge. Later on, through continuous research he added two additional intelligences [4], [5].
1. Verbal/Linguistic (makes use of the spoken and written word)

2. Logical/Mathematical (makes use of numbers, calculations, logic, classifications, and critical thinking)

3. Spatial (makes use of visual aids, visualization, color, art, and metaphor)

4. Bodily/Kinesthetic (makes use of the whole body and hands-on experience)

5. Musical (makes use of music, environmental sounds, and sets key points in a rhythmic or melodic pattern)

6. Interpersonal/Social (makes use of discussion, cooperative learning, and large group simulation)

7. Intrapersonal/Self (makes use of one’s ability for self-reflection, as expressed in journal writing, computer work, brainstorming sessions, and guided imagery tours)

8. Naturalistic (makes use of students’ love and understanding of nature as expressed in classifying and system building)

9. Existential (makes use of students’ ability to conceptualize and philosophize deeper questions regarding human existence) [4], [6].

Additionally, Gardner [6] explains that MI in context can yield true, authentic learning. Transforming the curriculum, through hands-on, all inclusive pedagogy, can only produce positive results even for those students who have been left behind, have been ignored, or simply have been labeled learning disabled. The only option for educators is either to nurture and strengthen their students’ intelligences or ignore them and allow them to deteriorate. As a result, Gardner does not ask, “How smart am I?” But rather, he asks, “How am I smart?” As far as he is concerned, there are no more or less intelligent students. There are simply differently able students. Absorbing course material can be different and unique for each student based on this model. Hence the reason MI and distance learning go hand-in-hand. For example, desktop and web-based publishing can be very effective learning tools for the verbal/linguistic learner. Furthermore, email can be another tool that verbal/linguistic learners can use to further develop their learning style. For the logical/mathematical learner, analyzing data, using search engines to run queries or use various online platforms to problem solve can be very effective as well. The visual/spatial learner can benefit from various technological tools, such as PowerPoint slide shows, charting and graphing, utilizing online platforms and editors, and even digital animation. Stimulating the bodily/kinesthetic learner through technology and web-based application is quite easy. Diagramming, videoconferencing, sorting various materials by attributes, and participating in virtual group simulations can be some of the activities available to the bodily/kinesthetic intelligence.

Incorporating digital sounds into PowerPoint/multimedia presentations can easily accommodate the musical intelligence. The intrapersonal learner can work with answers to guided questions posted on the discussion section of the course (Blackboard, WebCT, Moodle), whereas the interpersonal intelligence can be stimulated by synchronous (chat-rooms) or asynchronous (email, discussion boards), group discussion, and various collaborative projects. The naturalist learner works well with organization. As a result, organizing and making sense of information, through the creation of databases or semantic mapping, benefits this intelligence. Finally, the existential intelligence can be stimulated through learning experiences that examine the “big picture” of learning. In this case, virtual communities can help the existential learner feel like he/she belongs to something larger than family, community or classroom. Virtual art exhibits and virtual field trips can also help in experiencing the beauty that surrounds the existential learner [6].

In other words,

Designing instruction for learner populations who choose to learn at some distance from a traditional classroom presents an opportunity to effectively apply Howard Gardner’s Theory of Multiple Intelligences through the general design of course content, the use of specific instructional activities, general communication, and improved participant interaction. The appropriate use of these eight intelligences will also increase the likelihood that the learner will retain new knowledge and remain an active learner during the entire instructional process. Finally, incorporating multiple intelligence theory into the design of instruction can provide multiple avenues for learning based on an individual’s preferred style regardless of the discipline or the geographic dispersion of the intended learners [7].

Additionally, Dr. Sheryl Asen [8] has identified ten criteria for the use of technology in traditional as well as online instruction. A few of Dr. Asen’s criteria are as follows:

1. Students are involved in tasks that are broad in scope and challenging. Activities should span a range of related, intellectually demanding experiences that are not divided into fragmented talks (Existentialist).

2. Students, rather than the teacher, have control over the learning. The teacher serves as more of a guide, coach, and resource rather than a superior or administrator (Intrapersonal).

3. Students work collaboratively and cooperatively. Learning tasks should not be accomplished in social isolation (Interpersonal).

4. Students participate in varied learning tasks. This includes both variations in the format of the activities and their objectives (Musical, kinesthetic).

5. Students have opportunities to address learning tasks in different ways. Different approaches to a presented activity can be explored (Naturalistic).

6. Students are encouraged to offer varied solutions to a given problem. Reasoned answers and appropriate products are not limited to pre-set responses. All justifiable and fitting answers and products are accepted (Visual/spatial) [8].

The benefit of using these criteria in conjunction with the MI paradigm to create and organize instruction is clear. Undoubtedly, according to the MI paradigm, models of teaching are really models of learning [9]. Teaching and learning cannot be shaped through a fixed, rigid modus operandi. On the other hand, change and growth can be achieved only if education is not entirely the teacher’s responsibility, but rather it is an alliance between student and teacher. As a result, for both student and teacher, learning
cannot be a passive activity. In other words, students must actively participate in their learning, for even the greatest teacher cannot individually generate or promote student success [10], but collaboratively, “a good teacher can provide a rewarding educational experience” [11]. Interestingly, Gardner maintains that learning is both a social and a psychological process. As a result, when students understand the balance of their own intelligences, they begin to manage their own learning and value their individual strengths [12].

In the same sense, humor, coupled with Gardner’s MI theory and technology can enhance teaching and learning. In the recent years, in higher education, humor has been viewed as an important teaching tool in courses such as statistics [13], [14] & [15] law [16], and other courses that students find dull and difficult [17]. Humor has been said to facilitate the retention of innovative information [18], [19] & [15], to increase learning speed [20], improve problem solving skills [21], relieve stress [22], reduce test anxiety [23], [24] & [25], and increase perceptions of teacher credibility [26], and like it was mentioned above: humor can be incorporated into tests [23], [27] & [28]. “From an educator’s standpoint, using humor in the classroom cannot only increase the students’ attention spans, but also encourage the discussion of divergent ideas. It can improve morale and communication skills, increase retention of information, and make learning and teaching a more enjoyable experience” [2]. There are many resources that can be used to enhance classroom teaching through humor. Bringing jokes and cartoons to class or encouraging students to do the same makes for a lively, encouraging environment. Sharing with the class prior to the start of the lesson is always a good idea, so that there are minimal interruptions to the lesson plan of the day [2]. Jerry King further suggests bringing a different pointer for your board or PowerPoint presentations. Golf clubs, fishing rods, pool cues, kitchen utensils, makeup brushes, and the like make for an appealing and energetic environment [2]. Emoticons, avatars, cartoons, written jokes, and simulations (Second Life) can enhance, in the same way, online instruction. Including a trivial question or a joke halfway into a quiz or a test, for example, can relieve stress and put students at ease. It is quite obvious that humor, technology and online platforms, including social media sites ought to be considered essential tools in the MI classroom and used to accommodate all students’ learning needs.

Moreover, incorporating humor into dry lecture material whether online or in the traditional classroom, aids in relaxing even the most reluctant of students, spruces up a course and positively motivates everyone involved. For instance, using movie and/or television show themes makes current events more palatable and further encourages students to make a positive change and take control of their learning. Clearly, when dealing with students who are able to unwind and willing to learn, the teacher’s job becomes much easier. Research shows that teachers who “use written language that includes humor and metaphor,” attain better learning outcomes in the traditional classroom and online [29]. However, it is very important to be as clear as possible when using humor, especially online. In fact, Gibbs and Fewell suggest, “If the instructor must interject humor and wants the students to know that the communication was an instance of humor, the use of an emoticon, such as a smiley or frowning face, would be in order” [29]. Humor, actually, creates a sense of community among online students. At the same time, Ian J. McCooag affirms, “Multiple Intelligence and technology blend in the modern, changing environment of education. To compete in the world marketplace, today’s students must acquire twenty-first century skills, such as global awareness and social responsibility. Technology allows these skills to be presented” [30].

This research project was approved in 2003 by the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL), a foundation that fosters scholarly teaching and learning [31]. I helped organize and facilitate a group at Briarwood College to pursue research in teaching and learning. After extensive research on various learning theories, and several meetings and discussions, our group decided to work with Howard Gardner’s MI theory. In other words, our chapter of the CASTL Teaching Scholars’ Group proposed that by utilizing Gardner’s MI paradigm, Briarwood College students’ involvement, understanding, and overall academic performance should improve. Our pilot study began in the Spring 2003. It included the following courses:

- ENG099: English Fundamentals
- ENG103: English Composition
- COMP101: Introductory Computers
- OAD208: Legal Office Procedures
- OAD209: Administrative Office Procedures
- OTA104: Foundations for the Treatment of Physical Disabilities
- OTA106: Clinical Rehabilitation Skills/Lab
- OTA108: Psychosocial Pathology and Function
- PSY205: Death and Dying
- PSY206: Human Relations

A total of 177 college freshmen enrolled in the aforementioned courses during the Spring 2003 Semester, participated. We compared their performance to a group of students who were also enrolled in the aforementioned courses taught through a traditional, lecture/seminar instruction, in 2001 and 2002. The configuration of our research concentrated on: (1) Determination of individual student learning styles, (2) Pre-assessment, (3) Faculty’s attempts to design learning activities incorporating learning styles, (4) Midterm assessment, (5) Post-assessment, and (6) Gathering and analyzing of data. Throughout the semester, we assessed our students by using several tools, including an MI Assessment, which we dispensed the first day of classes. We also administered personalized, supplementary assessments at midterm and during final examinations to ensure student success and give our students the opportunity to assess the courses they were taking. At the same time, we shared information regarding the students’ role in using MI assessments to maximize their learning experience. Checks for understanding, observation, writing (formal and informal), discussion, performance (presentations), quizzes, and tests were part of the instructional model. That is to say, we used several tools to assess students’ learning and retention of the
material, such as observation, writing (formal and informal), discussion, performance (presentations), quizzes, and tests, among others. More specifically, we used a variety of MI Assessment tools via the Internet for the students who had access and hard copies for those who had not. I have found that the assessment offered through the website, *Literacy Works* is one of the best. Computerized scoring is available at the conclusion of the 56-question assessment, and the students’ top three intelligences are listed with sufficient explanation and practical studying tips. Furthermore, the website offers ample resources regarding career choices and curriculum materials [32].

### III. RESULTS

Our research yielded several interesting results: between Spring Semester 2001 and Spring Semester 2003 our success (passing the course) rate increased by nearly 17%. At the same time, the percentage of students who withdrew from our courses decreased by more than 12%. Additionally, 84% students at midterm said that the courses were good, very good, and excellent, a number that increased to 96% at the end of the semester. The over all primary intelligence for a large number of our students was social or interpersonal (38.5%) with self or intrapersonal a close second (34%). As far as our success/failure rate, a 17% increase in our passing rate and a 12% decrease in withdrawals. When students were asked certain questions regarding their perception of this application in the classroom, 96.5% strongly agreed that the benefits in instructor use of MI were positive. Most students (98%) agreed and strongly agreed that the MI assessment assisted them in becoming more effective learners.

### IV. DISCUSSION

The results were promising and were presented at several national and international conferences. Additionally, this research led to a number of publications [33], [34], [35], [36] & [37]. It seems the MI paradigm has been adapted by a number of colleges and universities across the United States of America. The application of MI in conjunction with humor and social media, which was in its infancy at Briarwood College, confirms our suspicions that most of our students do not learn through the two primary intelligences, Verbal/Linguistic and Logical/Mathematical. Beginning with the inclusion of technology for both online and traditional classes (colorful, multimedia PowerPoint presentations, Internet and database research, wikis, blogs, social networking, email, chat-rooms, video, and audio presentations), followed by extensive discussion both online, through social networking sites, such as FaceBook, LinkedIn, Second Life, and in the classroom, to hone critical thinking skills, seemed to unveil an enthusiastic student body. Additionally, ample use of clearly defined hand-outs, group work, writing workshops, and labs, including peer-editing, various student presentations on particularly difficult points, guided journal writing, production of multiple ungraded drafts, and electronic portfolio submissions enabled students to take charge of their learning and directly contribute to positive learning outcomes.

### V. CONCLUSION

Exposing students to Gardner’s MI paradigm can only benefit the college classroom and higher education in general. The success of such shift of the teaching/learning paradigm can only be based on supportive teaching and administrative staff, students who are aware of our concerns and our willingness to change and adapt our teaching methods to assist them in their learning, a continuous process of implementing the MI approach in future classes, and an attempt to develop a means to quantify academic improvement. Furthermore, it is vital to build on past successes, but most importantly, to recognize the education evolution process and to be open and willing to continually analyze and modify teaching methods and course content, as necessary, to accommodate all students’ learning needs. In other words, being flexible and accommodating to students are key components in fostering student learning in a productive, culturally diverse, and all-inclusive classroom. It must be emphasized, however, that this is not about simply changing teaching methods; it is not an exercise in methods. It is about caring for our students as individuals and about our willingness to lend a helping hand; perhaps it is about becoming the guiding light in their journey. That is to say, encouraging students to take control of their learning by making them aware of their primary intelligences can make a great deal of difference in their educational experience. Perhaps then, those students who never anticipated to be college graduates because of their inability to conform to traditional logical/mathematical and linguistic models will achieve success and look forward to a bright future as college graduates.

### REFERENCES


