# The Use of the Multiple Intelligences Inventory in the Classroom

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### Introduction

Individuals from diverse backgrounds of race, culture, gender, language and educational experiences possess a myriad of teaching and learning styles, affecting the quality of their educational outcomes. For successful educational outcomes for diverse students it is imperative for instructors to align their teaching styles with the learning styles of their students. The Multiple Intelligence (MI) theory proposed by Gardner (1983) is a valuable tool in achieving the above goal. The MI theory suggests that students learn best about a domain when they experience that domain through the mirror of different "intelligences": linguistic intelligence, logical-mathematical intelligence, spatial intelligence, bodily-kinesthetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence, naturalistic intelligence, and existentialist intelligence<sup>1</sup> (Gardner, 2000). There are several ways to be intelligent within each of the intelligences, and every individual possesses all of the intelligences. Armstrong (2000) postulates that it is possible to attain an adequate level of competency in each of the intelligences.

Gardner asserts that pedagogical strategies typically employed in classrooms are biased in favor of two intelligences--linguistic and logical-mathematical, favoring those students who are strong in these intelligences. It is important to reflect on how stronger or more developed intelligences in any area other than the linguistic or logical-mathematical areas have negatively impacted conclusions about students' abilities.

Teaching for the variety of learning styles found in a classroom can present a challenge to any instructor. According to Lazear (1992), the instructor applying MI theory can show students how to use their more developed intelligences to assist them in understanding content. Presenting material in a manner which engages most or all of the intelligences allows an instructor to reinforce the same material in a variety of ways, leading to a deeper understanding of the content and providing a wider range of students the opportunity to successful participate in classroom learning (Brualdi, 1996).

<sup>&</sup>lt;sup>1</sup>Gardner organically identified seven intelligences and subsequently identified two additional intelligences: the naturalist and existentialist.

## **Description of Activity**

Within a variety of courses that may cover such topics as leadership, teaching or learning styles, diverse populations, or even management styles, an opportunity exists for students to be introduced to MI theory as a tool to assist with developing additional knowledge around the course topics. After students are provided with background information on Gardner's theory, they are given the opportunity to complete the Multiple Intelligences (MI) Inventory developed by Thomas Armstrong (2000). This is available via the web or can be provided in hard copy format to students in class. Although the MI Inventory could be completed at any point within a course, an ideal time is at the start of the semester or quarter, as the results may provide the instructor with insight that can assist with lesson planning.

This inventory has sections coinciding with the intelligences identified by Gardner. Students read ten descriptive statements for each section and place a checkmark next to statements that best describe them. Once completed, checkmarks are tabulated individually. This inventory reflects developed and less developed intelligences by the number of checkmarks in each category. Students can then individually and/or collectively graph their results. It is important to note that each person possesses all intelligences, some at varying degrees (Gardner, 1993).

The instructor can facilitate a class discussion on students' insights about the MI Inventory related to their own past or current educational experiences, leisure opportunities that may have nurtured the development of specific intelligences, or even leisure pursuits that could assist with the enhancement of a particular intelligence.

#### Outcomes

Incorporating MI theory in the delivery of course content results in students gaining a greater awareness of self and others and assisting them to be more attentive and focused, leading to an enhanced learning experience. When instruction is delivered using a MI perspective, students have reported that they develop an awareness of themselves, and a realization that they are smart in their own way. This is consistent with literature that suggests when opportunities to examine one's strengths are provided, personal worth and self-esteem are enhanced; and, competence and better learning results will develop (Lumsden, 1997). Delivering instruction based on MI affords students with opportunities to pursue their strengths. Students have also indicated that when instruction is delivered employing a MI perspective they are able to be more attentive and better focused. A possible explanation could be that the realization that students were smart in their own way allowed for positive emotions. Emotion drives attention, which in turn drives learning, and together they are the pathways into all rational cognitive behavior (Sylwester, 1998).

Students majoring in the recreation and leisure studies commonly report that they enjoy the use of interaction and hands-on opportunities for learning. This is not too surprising because often the stronger or more developed intelligences of these students are bodily-kinesthetic and interpersonal. When students are in a safe and flexible environment, where they are actively engaged in their learning and in control of the learning process, they want to learn and grow and believe that they can (Cherniss, 1998). Flexibility also allows students to be creative in exploring knowledge in a given topic area; and, through incorporating personal experiences, connections can be made to "real life" applications of the material. Individual styles of learning can be acknowledged. Thus, intelligence can be evidenced, and further development of abilities can be fostered.

## Suggestions for Others

The MI inventory is a useful tool to improve pedagogical strategies leading to enhanced learning experiences for students. Such a tool affords the instructor an opportunity to critically examine and explore the relationship between teaching styles and learning styles of students. The instructor may consider reorganizing lesson plans and instructional strategies. Lesson plans could include traditional approaches such as using PowerPoint or overhead transparencies and handouts, as well as a variety of other learning opportunities that tap the various intelligences. For example dancing, chanting, drawing or individual reflections could be incorporated to engage bodily-kinesthetic, musical, spatial and intrapersonal intelligences respectively (Armstrong, 2003).

It is important to remember that teaching is a process. Because no one method is best for all learners, it is appropriate to use a mixture of strategies. Instructors must continue to assess and evaluate methods through open dialogue with their students to assure that the students' needs can be met. In doing so, instructors not only acknowledge that they are a part of a learning process, but create the opportunity for students to realize that they too, are part of the process.

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