INTEGRATING LEARNING STYLE AND MULTIPLE INTELLIGENCES IN TEACHING AND LEARNING PROCESS

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ABSTRACT:
Students' exhibit different learning styles and multiple intelligences, and only by accommodating these various abilities can instructors properly plan and conduct assignments and assess what students have learned. Students have different learning styles and multiple intelligences. This has implications for the design and execution of a field study, or any teaching situation. In addition to having differences in learning styles, not everyone is smart in the same way, according to Gardner, He says that individuals are intelligent to some degree such as: musical, verbal linguistic, interpersonal, intrapersonal, etc. This article outlines the importance of learning styles and multiple intelligences in teaching and learning process, as well as instructional techniques that work best with students' respective learning traits.

Key words: *Learning Style, Multiple Intelligence and Teaching and Learning Process*

A. INTRODUCTION

Learning style is something that has to be notice well. It may give a good contribution for students' multiple intelligences. This is because teachers face many students' characters which are not the same in the classroom. It is based on teachers' model of teaching to give something positive in students' multiple intelligences. In the 20th century, two great theories have been put forward in an attempt to interpret human differences and to design educational models around these differences. Learning-style theory has its roots in the psychoanalytic community; multiple intelligences theory is the fruit of cognitive science and reflects an effort to rethink the theory of measurable intelligence embodied in intelligence testing.

Both, in fact, combine insights from biology, anthropology, psychology, medical case studies, and an examination of art and culture. But learning styles emphasize the different ways people think and feel as they solve problems, create products, and interact. The theory of multiple intelligences is an effort to understand how cultures and disciplines shape human potential. Though both theories claim that dominant ideologies of

intelligence inhibit our understanding of human differences, learning styles are concerned with differences in the *process* of learning, whereas multiple intelligences center on the *content* and *products* of learning. Until now, neither theory has had much to do with the other.

Howard Gardner (1993:45) spells out the difference between these two theories:

"In MI (multiple intelligence) theory, I begin with a human organism that responds (or fails to respond) to different kinds of *contents* in the world. . . . Those who speak of learning styles are searching for approaches that ought to characterize *all* contents.We believe that the integration of learning styles and multiple intelligence theory may minimize their respective limitations and enhance their strengths, and we provide some practical suggestions for teachers to successfully integrate and apply learning styles and multiple intelligence theory in the classroom"

B. DISCUSSION

a. Learning styles

Learning-style theory begins with Carl Jung (1927:83), who noted major differences in the way people perceived (sensation versus intuition), the way they made decisions (logical thinking versus imaginative feelings), and how active or reflective they were while interacting (extroversion versus introversion). Isabel Myers and Katherine Briggs (1977:21), who

created the Myers-Briggs Type Indicator and founded the Association of Psychological Type, applied Jung's work and influenced a generation of researchers trying to understand specific differences in human learning. Although learning-style theorists interpret the personality in various ways, nearly all models have two things in common:

- *A focus on process.* Learning-style models tend to concern themselves with the process of learning: how individuals absorb information, think about information, and evaluate the results.

- *An emphasis on personality.* Learning-style theorists generally believe that learning is the result of a personal, individualized act of thought and feeling.

Most learning-style theorists have settled on four basic styles. Our own model, for instance, describes the following four styles:

- *The Mastery style learner* absorbs information concretely; processes information sequentially, in a step-by-step manner; and judges

the value of learning in terms of its clarity and practicality.

- *The Understanding style learner* focuses more on ideas and abstractions; learns through a process of questioning, reasoning, and testing; and evaluates learning by standards of logic and the use of evidence.

- *The Self-Expressive style learner* looks for images implied in learning; uses feelings and emotions to construct new ideas and products; and judges the learning process according to its originality, aesthetics, and capacity to surprise or delight.

- *The Interpersonal style learner*, like the Mastery learner, focuses on concrete, palpable information; prefers to learn socially; and judges learning in terms of its potential use in helping others.

According to Silver and Hanson (1995:40), Learning styles are not fixed throughout life, but develop as a person learns and grows. Our approximate breakdown of the percentages of people with strengths in each style is as follows: Mastery, 35 percent; Understanding, 18 percent; Self-Expressive, 12 percent; and Interpersonal, 35 percent.

Most learning-style advocates would agree that all individuals develop and practice a mixture of styles as they live and learn. Most people's styles flex and adapt to various contexts, though to differing degrees. In fact, most people seek a sense of wholeness by practicing all four styles to some degree. Educators should help students discover their unique profiles, as well as a balance of styles.

b. Strengths and limitations of learning styles models

Learning-styles models have a couple of limitations. *First*, they may fail to recognize how styles vary in different content areas and disciplines.*Second*, these models are sometimes less sensitive than they should be to the effects of context on learning. Emerging from a tradition that viewed style as relatively permanent, many learning-style advocates advised altering learning environments to match or challenge a learner's style. Either way, learning-style models have largely left unanswered the question of how context and purpose affect learning.

The following are some *strengths* of learning-style models:

- They tend to focus on how different individuals process information across many content areas.

- They recognize the role of cognitive and affective processes in learning and, therefore, can significantly deepen our insights into issues related to motivation.

- They tend to emphasize thought as a vital component of learning, thereby avoiding reliance on basic and lower-level learning activities.

c. Multiple intelligences

Fourteen years after the publication of *Frames of Mind*, the clarity and comprehensiveness of Howard Gardner's design continue to dazzle the educational community. Who could have expected that a reconsideration of the word *intelligence* would profoundly affect the way we see ourselves and our students?

Gardner (1993:19) describes seven intelligences: linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal. The distinctions among these intelligences are supported by studies in child development, cognitive skills under conditions of brain damage, psychometrics, changes in cognition across history and within different cultures, and psychological transfer and generalization.

Thus, Gardner's model is backed by a rich research base that combines physiology, anthropology, and personal and cultural history. This theoretical depth is sadly lacking in most learning-style models. Moreover, Gardner's seven intelligences are not abstract concepts, but are recognizable through common life experiences. We all intuitively understand the difference between musical and linguistic, or spatial and mathematical intelligences, for example. We all show different levels of aptitude in various content areas. In all cases, we know that no individual is universally intelligent; certain fields of knowledge engage or elude everyone. Gardner has taken this intuitive knowledge of human experience and shown us in a lucid, persuasive, and well-researched manner how it is true.

Yet, there are two gaps in multiple intelligence theory that limit its application to learning. First, the theory has grown out of cognitive science—a discipline that has not yet asked itself why we have a field called cognitive science, but not one called affective science. Learning-style theory, on the other hand, has deep roots in psychoanalysis. Learning-style theorists, therefore, give psychological *affect* and individual personality central roles in understanding differences in learning.

Multiple intelligence theory looks where style does not: It focuses on the content of learning and its relation to the disciplines. Such a focus, however, means that it does not deal with the individualized process of learning. This is the second limitation of multiple intelligence theory, and it becomes clear if we consider variations within a particular intelligence.

Are conductors, performers, composers, and musical critics all using the same musical intelligence? What of the differing linguistic intelligences of a master of free verse like William Carlos Williams and a giant of literary criticism like Harold Bloom? How similar are the bodily-kinesthetic intelligences of dancers Martha Graham and Gene Kelly or football players Emmitt Smith and golfer Tiger Woods? How can we explain the difference in the spatial intelligences of Picasso and Monet—both masters of modern art?

Most of us would likely agree that different types of intelligence are at work in these individuals. Perhaps one day, Gardner's work on the "jagged profile" of combined intelligences or, perhaps, his insistence on the importance of context will produce a new understanding of intelligence. But at the moment, Gardner's work does not provide adequate guidelines for dealing with these distinctions. Most of us, however, already have a way of explaining individual differences between Monet and Picasso, Martha Graham and Gene Kelly, or between different students in our classrooms: We refer to these individuals as having distinct *styles*.

Of course, as Gardner would insist, radically different histories and contexts go a long way in explaining distinctions between Monet and

Picasso, for example. But how are teachers to respond to this explanation? As all teachers know, we must ultimately consider differences at the individual level. Learning styles, with their emphasis on differences in individual thought and feeling, are the tools we need to describe and teach to these differences.

Best of all, learning styles' emphasis on the individual learning process and Gardner's content-oriented model of multiple intelligences are surprisingly complementary. Without multiple intelligence theory, style is rather abstract, and it generally undervalues context. Without learning styles, multiple intelligence theory proves unable to describe different processes of thought and feeling. Each theory responds to the weaknesses of the other; together, they form an integrated picture of intelligence and difference.

d. Integrating learning style and Multiple intelligences

In integrating these major theories of knowledge, we moved through three steps. First, we attempted to describe, for each of Gardner's intelligences, a set of four learning processes or abilities, one for each of the four learning styles. For linguistic intelligence, for example, the *Mastery* style represents the ability to use language to describe events and sequence activities; the *Interpersonal* style, the ability to use language to build trust and rapport; the *Understanding* style, the ability to develop logical arguments and use rhetoric; and the *Self-expressive* style, the ability to use metaphoric and expressive language.

The following outline are abilities and sample vocations for the seven intelligences, by learning style:

1. **Linguistic**
- Mastery: The ability to use language to describe events and sequence activities *(journalist, technical writer, administrator, contractor)*
- Interpersonal: The ability to use language to build trust and rapport *(salesperson, counselor, clergyperson, therapist)*
- Understanding: The ability to develop logical arguments and use rhetoric *(lawyer, professor, orator, philosopher)*
- Self-expressive: The ability to use metaphoric and expressive

language *(playwright, poet, advertising copywriter, novelist)*

2. **Logical-Mathematical**
- Mastery: The ability to use numbers to compute, describe, and document *(accountant, bookkeeper, statistician)*
- Interpersonal: The ability to apply mathematics in personal and daily life *(tradesperson, homemaker)*
- Understanding: The ability to use mathematical concepts to make conjectures, establish proofs, and apply mathematics and data to construct arguments *(logician, computer programmer, scientist, quantitative problem solver)*
- Self-expressive: The ability to be sensitive to the patterns, symmetry, logic, and aesthetics of mathematics and to solve problems in design and modeling *(composer, engineer, inventor, designer, qualitative problem solver)*

3. **Spatial**
- Mastery: The ability to perceive and represent the visual-spatial world accurately *(illustrator, artist, guide, photographer)*

- Interpersonal: The ability to arrange color, line, shape, form, and space to meet the needs of others *(interior decorator, painter, clothing designer, weaver, builder)*
- Understanding: The ability to interpret and graphically represent visual or spatial ideas *(architect, iconographer, computer graphics designer, art critic)*
- Self-expressive: The ability to transform visual or spatial ideas into imaginative and expressive creations *(artist, inventor, model builder, cinematographer)*

4. **Bodily-Kinesthetic**
- Mastery: The ability to use the body and tools to take effective action or to construct or repair *(mechanic, trainer, contractor, craftsperson, tool and dye maker)*
- Interpersonal: The ability to use the body to build rapport, to console and persuade, and to support others *(coach, counselor, salesperson, trainer)*
- Understanding: The ability to plan strategically or to critique the actions of the body *(physical*

educator, sports analyst, professional athlete, dance critic)

- Self-expressive: The ability to appreciate the aesthetics of the body and to use those values to create new forms of expression *(sculptor, choreographer, actor, dancer, mime, puppeteer)*

5. **Musical**

- Mastery: The ability to understand and develop musical technique *(technician, music teacher, instrument maker)*

- Interpersonal: The ability to respond emotionally to music and to work together to use music to meet the needs of others *(choral, band, and orchestral performer or conductor; public relations director in music)*

- Understanding: The ability to interpret musical forms and ideas *(music critic, aficionado, music collector)*

- Self-expressive: The ability to create imaginative and expressive performances and compositions*(composer, conductor, individual/small-group performer)*

6. **Interpersonal**

- Mastery: The ability to organize people and to communicate clearly what needs to be done *(administrator, manager, politician)*

- Interpersonal: The ability to use empathy to help others and to solve problems *(social worker, doctor, nurse, therapist, teacher)*

- Understanding: The ability to discriminate and interpret among different kinds of interpersonal clues*(sociologist, psychologist, psychotherapist, professor of psychology or sociology)*

- Self-expressive: The ability to influence and inspire others to work toward a common goal *(consultant, charismatic leader, politician, evangelist)*

7. **Intrapersonal**

- Mastery: The ability to assess one's own strengths, weaknesses, talents, and interests and use them to set goals *(planner, small business owner)*

- Interpersonal: The ability to use understanding of oneself to be of service to others *(counselor, social worker)*

- Understanding: The ability to form and develop concepts and theories based on an examination of oneself *(psychologist)*

- Self-expressive: The ability to reflect on one's inner moods, intuitions, and temperament and to use them to create or express a personal vision *(artist, religious leader, writer)*

As the final step in constructing the intelligence-learning style menus, we collected descriptions of products that a person with strengths in each intelligence and style might create. For example, in the linguistic intelligence domain, a person with the *Mastery* style might write an article, put a magazine together, develop a newscast, or describe a complex procedure. By contrast, a person with a *Self-expressive* style might write a play, spin a tale, or develop an advertising campaign. In the kinesthetic intelligence domain, a person with an *Understanding* style might choreograph a concept or teach a physical education concept; a person with a *Self-expressive* style might create a diorama or act out emotional states or concepts. A class display of such lists might accompany charts.

C. CONCLUSION

From the description above, multiple intelligences can be maximal through learning styles. It can be implemented on the teaching learning activity on the class by using a proper style of learning based on students' intelligence.

References :

Briggs, K.C., and I.B. Myers. (1977). *Myers-Briggs Type Indicator*. Palo Alto, Calif.: Consulting Psychologists Press.

Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.

Gardner, H. (1993). *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.

Jung, C. (1927). *The Theory of Psychological Type*. Princeton, N.J.: Princeton University Press.

Silver, H.F., and J.R. Hanson. (1995). *Learning Styles and Strategies*. Woodbridge, N.J.: The Thoughtful Education Press.