

## Lesson 2: The Foundation of MAST Methodology

### Part A

This lesson presents some of the main theories upon which the MAST methodology is based. You also learn a little about how these theories impact facilitation of a MAST project. This will be further explained in the next lesson.

#### What Is a Theory?

The word “theory” usually refers to an explanation that is given for an observation. For example, Sir Isaac Newton observed an apple falling from a tree and devised the theory of gravity to explain it. Scientific theories can be tested by formulating hypotheses, and then doing experiments to test the hypotheses. A successful experiment would help to substantiate the theory.

Psychological theories are possible explanations of human behavior, and educational theories relate to how we learn. Although the theories that are presented in this lesson are the result of research and have been tested, behavior is often not as easily categorized or defined as are principles of mathematics or physics. So these theories, while helpful in describing human behavior and learning, are not proven facts in the same way as we can prove scientific laws or mathematical theorems.

Some of these theories are controversial, but this lesson will not address the debate surrounding them. The theories are presented to give you an understanding of the basis of the MAST methodology.

#### Why Study Theories?

Now that you know the steps in the MAST process, understanding the underlying theories helps you to gain insight into why the methodology works. When you know that the MAST way of doing things is solidly based on educational, behavioral, and psychological research, you can become more confident in utilizing MAST techniques that may seem strange or unfamiliar.

One of the most important reasons to learn about the core theories is to enable you to be flexible in exercising the steps. Different situations call for different implementations of MAST methodologies, but as long as you keep the theories in mind, you will be able to adapt to these scenarios and still be effective.

## Looking at Why We Do What We Do

This lesson presents several theories that form the basis for the MAST methodology. These include:

- Least Restrictive Environment theory
- Personality theories
  - Multiple Intelligences theory
  - Shapes theory
  - Left Right Brain theory

You also learn about some additional theories that relate to how people learn and perform. These are:

- Value-based Learning theory
- Ownership/Motivation Principles
- Scaffolding and Chunking theory
- Input/Output theories
- Brain-Based Education theories
- Reading theory
- Literature Circles theory
- Bloom's Taxonomy

## What Is the Least Restrictive Environment (LRE) Theory?

This theory comes from the Individuals with Disabilities Education Act (IDEA). It means that, as much as possible, students with disabilities should have a chance to participate with the non-disabled when it comes to education. When needed, they should have access to additional resources to attain educational goals.

Each student is assessed to determine what their needs might be and to devise an individualized learning plan for that student.

This may remind you of the assessment activity that is done before any of the MAST drafting and checking steps are done.

### LRE Focus: Removing Barriers

We know that people learn differently and have preferences for different types of instruction. They have diverse abilities and weaknesses.

To design a successful experience, the facilitator or teacher must address these issues. That is why the assessment of translators is an integral part of MAST.

Individual translators assigned to a MAST project may face certain barriers, such as no written language or lack of experience.

The MAST process helps to remove those barriers, so that anyone with language ability can be effective.

### **Least Restrictive Environment Example**

Think of someone who wants to learn to read well (assuming that they do have the ability to learn).

As an interim solution, you could temporarily supply a CD or other oral language materials. As the learner listens to the oral reading and interacts with writing, they would be using their oral language abilities while developing reading skills. Then you could gradually lessen the use of the oral materials as the reader becomes more fluent.

Use of the oral materials would remove the barrier of illiteracy temporarily while working toward a more permanent solution.

**Please proceed to Part B of Lesson 2.**