

Lesson 2: The Foundation of MAST Methodology

Part D

Examining Learning Theories

The whole idea of MAST is to teach participants from the local church a process for translating scripture rapidly, clearly, accurately, and naturally. One reason why MAST is so effective is that it is solidly based on tested theories of learning.

Six learning theories have been particularly influential in developing the MAST process:

- Value-Based Learning theory
- Scaffolding and Chunking theory
- Input/Output theory
- Brain-Based Education theories
- Reading theories
- Bloom's Taxonomy

Examining Value-Based Learning

MAST has been heavily influenced by the first learning theory that we discuss, which is Value-Based Learning theory.

Motivation is an internal state that arouses, directs, or maintains behavior.

From a combination of counseling methodology, psychology research and education theory, we have learned that there are certain factors in human existence that inspire people toward motivation, leading to higher performance in their work.

The value of these factors may vary from one individual to the next. For example, some people are very motivated by praise, while others are more motivated by having a voice in the process.

Factors Increasing Motivation

Well-known people in the field of marriage counseling and relationships, such as Dr. Gary Smalley and Dr. Kevin Leman, as well as highly regarded research organizations such as The Search Institute, have identified some common characteristics in humans that express a sense of value in individuals. These include the following factors:

- Honesty: truthful feedback (the slide depicts this as a cherry tree, reminiscent of George Washington who could not lie about cutting it down.)
- Praise: positive encouragement

- Common interest: showing that you value the relationship
- Protection: Safe learning environment; no fear of failure or embarrassment
- Service: Being able to give to others

Most people are intrinsically motivated to perform. However, as motivational factors increase, so does performance.

Examining Ownership/Motivation Principles

Research has shown a link between people's sense of ownership of a task and their motivation to complete it. Some components of ownership include choice (decision making), control (having a voice), and tasks that are related to a larger goal.

When first learning a task, the teacher exercises a great degree of control over the learning.

However, as students become increasingly motivated to take ownership for their learning, the role of the teacher becomes less and less. Students are supported, for a time, but then quickly transition to self-motivated control of the task.

As they complete challenging tasks, they become even more motivated to take on greater challenges.

In the role of facilitator, one of the most important techniques is asking good questions that stimulate thinking and suggest direction to the student, but do not dictate what path to take. As students are allowed more choices, this increases their ownership of the task and thereby increases their motivation to complete it.

Examining Scaffolding

When you think of a scaffold, you may think of a structure on the outside of a building, usually composed of wooden planks and metal poles, that is used by workers who are building, repairing, cleaning, or painting the building. It is a temporary structure that is removed when the task on that part of the building is complete.

The idea of scaffolding in learning theory is to provide a systematic framework to support learning so that students can perform beyond their initial capabilities.

Initially, this type of support is given based on the needs of the student, which can take into account diverse backgrounds and cultures. Resources are provided to facilitate the task at hand. The facilitator may model the desired outcomes, and then advise, coach, and guide the students as they seek to master the task.

Once a task is learned, additional concepts layer upon that framework. When students demonstrate understanding, support is gradually withdrawn for that particular task.

How can people be teamed up to make the most effective use of scaffolding? Having a more experienced person or persons on each team enables less experienced learners to benefit from their knowledge and master challenging tasks more rapidly and thoroughly.

Contrasting Scaffolding with Traditional Learning

Think back to how you learned mathematics when you were in school. The teacher presented a particular set of facts, such as the “times 2” multiplication tables. You learned from the teacher, and then by practicing multiplying different numbers by 2. Perhaps the teacher used flashcards to enhance your memorization of the facts. Once you showed mastery, you could progress to “times 3” multiplication. This type of learning was appropriate where rote memorization was needed.

In scaffolding, however, the teacher models desired behavior and coaches the learner while the behavior is being performed. As the learners begin to master the task, teacher involvement lessens.

Then another layer of learning builds upon the initial foundation, and the teacher initially gives support during learning of this second layer. As this layer is learned, the teacher may refer back to the first layer with encouraging questions such as, “Remember when you didn’t think you could do such and such, but you tried and were able to do it?” Or they may remind learners of facts mastered in the earlier layer(s).

As the learner progresses, the teacher may gradually withdraw the support for that task and then introduce something a little more challenging for the next layer of learning. Again, the teacher would initially support the learner in that task with modeling, coaching, guiding, and so on, and remind the student of what was learned in the foundational layers.

Once the learner is able, the teacher lessens support for the new layer.

Examining Chunking

Chunking is the process of breaking large concepts into smaller pieces in order to remember them, and then taking the individual units of information and grouping them into larger units.

Working memory functions optimally with no more than four to seven pieces of information. By chunking information in smaller blocks, the information becomes easier to move from working memory to permanent memory, be linked to prior knowledge, and be recalled at a later time.

Chunking Examples

For example, to memorize a long grocery list, it may be helpful to break it into smaller chunks based on categories of meat, dairy, canned goods, and so on. Once the items in each category are memorized, they can be combined to form the long list.

Before the use of cell phones, people usually had to memorize several phone numbers. The practice of writing a ten-digit number by breaking it up into area code, exchange, and number facilitated this memorization and recall.

Please proceed to Part E of Lesson 2.