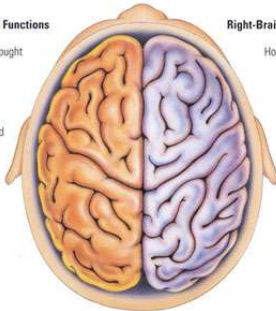
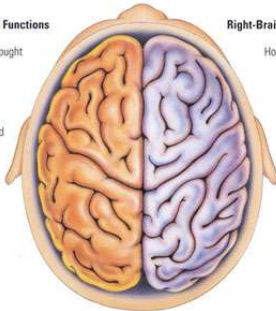
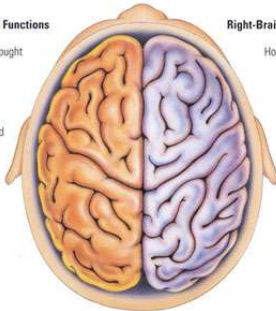


MODULE 13

UNDERSTANDING THE LEADERSHIP BRAIN

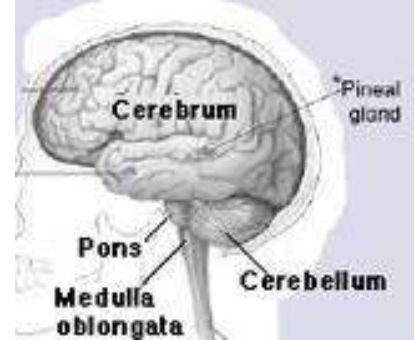
Segment	Content			
Introduction	<p>In <i>The Wizard of Oz</i>, the Scarecrow wants a brain. He wants a brain, so that he can think and make decisions. He wants a brain so that he can be successful. Sometimes we may wish we had a brain, or at least one which is more effective. Today, as we explore some simple truths about the brain and how it works, there are some things you can do to help your brain work more efficiently. Current brain research and health studies reveal that individuals, who take the time to exercise, drink plenty of water, and eat healthy meals, have healthier brains. So, as you are reading about all of the leadership development and work on applying these principles to your professional life, remember to take time for yourself. Take time daily to exercise your body and your brain. Choose healthy foods and drink plenty of water. Keep your health a high priority to ensure that you will be able to lead effectively.</p>			
Learning and development objective	<p>At the end of this module, you will be able to describe several functions of the brain which affect your leadership potential. You will also know how to plan to maximize your brain’s potential.</p>			
Main text	<p>Neuroscientists and their study of the human brain have brought about significant insights into understanding the brain, in recent years. As a part of their study, areas of the brain have been isolated and the tasks they perform identified. Let’s delve into an overview of our extremely complex brain.</p> <p>Cerebrum and Prefrontal Cortex</p> <p>The cerebrum is the largest part of the brain (85% of the brain’s weight) and consists of the two halves of the brain which cover the top of the head. One half of the cerebrum is focused on creative processes, and the other side on analytical processes. Within the cerebrum, are multiple areas, which control different functions of the body. The prefrontal cortex, located at the front of a person’s head, is responsible for rational and logical thinking. It is here that the executive functioning of thoughts and processes occur. All new sensory information is sent to this prefrontal cortex, where it is processed and sent to other areas of the brain, where reactions to the information are generated. The large prefrontal cortex in humans is unique to our species.</p> <div data-bbox="1021 1355 1420 1724" style="text-align: center;"> <p>EXPERIENCE = USABILITY/ANALYTIC + DESIGN/CREATIVE</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>Left-Brain Functions</p> <ul style="list-style-type: none"> Analytic thought Logic Language Science and math </td> <td style="vertical-align: middle;">  </td> <td style="vertical-align: top;"> <p>Right-Brain Functions</p> <ul style="list-style-type: none"> Holistic thought Intuition Creativity Art and music </td> </tr> </table> </div>	<p>Left-Brain Functions</p> <ul style="list-style-type: none"> Analytic thought Logic Language Science and math 		<p>Right-Brain Functions</p> <ul style="list-style-type: none"> Holistic thought Intuition Creativity Art and music
<p>Left-Brain Functions</p> <ul style="list-style-type: none"> Analytic thought Logic Language Science and math 		<p>Right-Brain Functions</p> <ul style="list-style-type: none"> Holistic thought Intuition Creativity Art and music 		

Cerebellum

The cerebellum is located at the base of the cerebrum and is the second largest part of the brain. From this part of the brain, comes control of muscle movement and balance.

Medulla Oblongata

The brain stem is at the brain’s base and is the home of the medulla oblongata, which controls the most critical life functions, such as, our heart rate, blood pressure, and breathing.



‘Executive Functioning’ of the Brain

‘Executive Functioning’ is the mental processes of the brain. The brain analyses the sensory information coming into the brain and then; plans, thinks abstractly, initiates appropriate actions, and inhibits inappropriate actions. The executive function connects a person’s past experiences, with new sensory information, and determines what action is needed. The Executive Function is responsible for the performance of all the following tasks:

- ▶ Making plans
- ▶ Setting and completing time schedules
- ▶ Focusing on more than one task in a given time period
- ▶ Using examples from the past to enhance conversations
- ▶ Evaluating successes and failures
- ▶ Reflecting on work progress
- ▶ Being flexible and making positive changes to ensure success of a project
- ▶ Seeking help when needed
- ▶ Working in groups

If a leader has problems with any of these areas, their ability to lead may be jeopardized, but do not panic. These skills can be enhanced or improved with some of the following simple concrete tasks to strengthen your ‘executive functioning’:

- ▶ Divide tasks into chunks and assign time limits for accomplishing each chunk
- ▶ Create visual organizers which outline step by step actions
- ▶ Create visual calendars which include deadlines for each part of the project
- ▶ Create time schedules and to do lists at the beginning of the day; and frequently review
- ▶ Use time organizers (set timers, phones, computers to sound an alert for time limits)
- ▶ Ask that directions be given in a written format, when possible
- ▶ Write due dates and deadlines at the top of each project
- ▶ Plan how you will transition between tasks, and the time allocated for each transition

- ▶ Organize your work space to enhance working on tasks
- ▶ Create different work spaces for different projects, when possible
- ▶ Make a list of supplies needed for a task or project and collect these items before starting work on the task
- ▶ Re-evaluate progress and re-organize your work space at least weekly
- ▶ Conduct a daily review of your 'to do' list and create a new one for the next day

The Importance of Self Discipline

Effective leaders, no matter how talented or how well their executive functioning is developed, will still have difficulty, if they have not developed self-discipline. Self-discipline is the ability of a leader to focus on what needs to be done, and seeing it through to completion, even when the leader is unmotivated. Plato, once stated, "The first and best victory is to conquer self." Another quote by John Foster, illustrates the importance of self-discipline; "A man without decision of character, can never be said to belong to himself... He belongs to whatever can make captive of him." One unknown writer compared leadership to riding a horse. The 'horse' is the leadership skills which will take you toward success, but self-discipline is the ability to manage the horse, and steer the horse, in the right direction. So how do you develop self-discipline?

- ▶ Be committed to your vision.
- ▶ Do not let emotions or feelings prevent the achievement of the goals
- ▶ Change your perspective on tasks which do not motivate you but are necessary for forward movement toward your vision. Give your unwanted task purpose.
- ▶ Be responsible for yourself and your actions. Do not let others influence you.

PFC Capacity

- ▶ **"Fight or flight" is an 'always on' mechanism.** Every person has an internal defence mechanism which is always turned 'on' and always working. This is the 'fight or flight' panic mode. Any time your brain identifies a potential threat to you physically, socially, or emotionally, your brain goes into panic mode and a decision is quickly made as to whether you will stay and fight, or whether you will take flight to insure your wellbeing. Think about cavemen during the dinosaur era. They lived out most of their existence in the panic mode because they never knew from moment to moment when the next threat to their safety would arise. In panic mode, your brain focuses only on survival and perceived threats. As a leader or a team member, when you are in panic mode, learning new information, collecting new data important for task completion, and logical thinking will be diminished. Being aware of these times when your brain recognizes a potential threat, and knowing how your body reacts, gives you powerful insight. Having this knowledge will empower you to take counter actions which will prevent you from going into survival mode and shutting down. As a leader, not only can you diminish the frequency of potential threats to yourself, but you can also present new information to your team members, in such a way as to diminish the potential 'threats' they feel, when you present them new information.
- ▶ PFC allows constant degrees of readiness in response to environmental stimulus

	<ul style="list-style-type: none"> ▶ The ‘always on’ world we live in provides huge stimulus <ul style="list-style-type: none"> ○ much of it is threatening to us to some extent ○ if this is not channelled, and it occurs as a default reflex action, then it will send messages to the part of the brain responsible for acting defensively, or aggressively, if necessary...panic mode ▶ The Away / Threat state is the ‘default’ state of the brain
Key point	<p>Understanding the Brain</p> <ul style="list-style-type: none"> ▶ Neuroscience has confirmed that the prefrontal cortex is the ‘executive’ area of the brain. ▶ All sensory stimuli pass through here and are directed to other parts of the brain for processing ▶ The prefrontal cortex is considerably larger in the human brain, than any other animal <p>PFC Capacity</p> <ul style="list-style-type: none"> ▶ “Fight or flight” is an ‘always on’ mechanism ▶ PFC allows constant degrees of readiness in response to environmental stimulus ▶ The ‘always on’ world provides huge stimulus <ul style="list-style-type: none"> ○ much of it is threatening to us to some extent ○ this is channelled, as a default reflex action, to the part of the brain which will act defensively, or aggressively, if necessary ▶ The Away / Threat state is the ‘default’ state of the brain <p>Executive Processing</p> <ul style="list-style-type: none"> ▶ Understand your emotions and act appropriately ▶ Fully develop and enhance your executive processing skills ▶ Develop excellent self-discipline
Task for the day	<ul style="list-style-type: none"> ▶ Your task today is to be aware of and determine when, you are in a flight or fight mode. Remember how you felt in these situations, to reflect on later.
Questions	<ul style="list-style-type: none"> ▶ Think back to when you found yourself in the flight or fight mode. What were you feeling emotionally? ▶ How did these feelings manifest in your physical body? ▶ Remember how you were feeling during these events, so that in the future, you will immediately recognize the panic mode into which your brain has moved. Awareness is the first step toward controlling your reactions.