

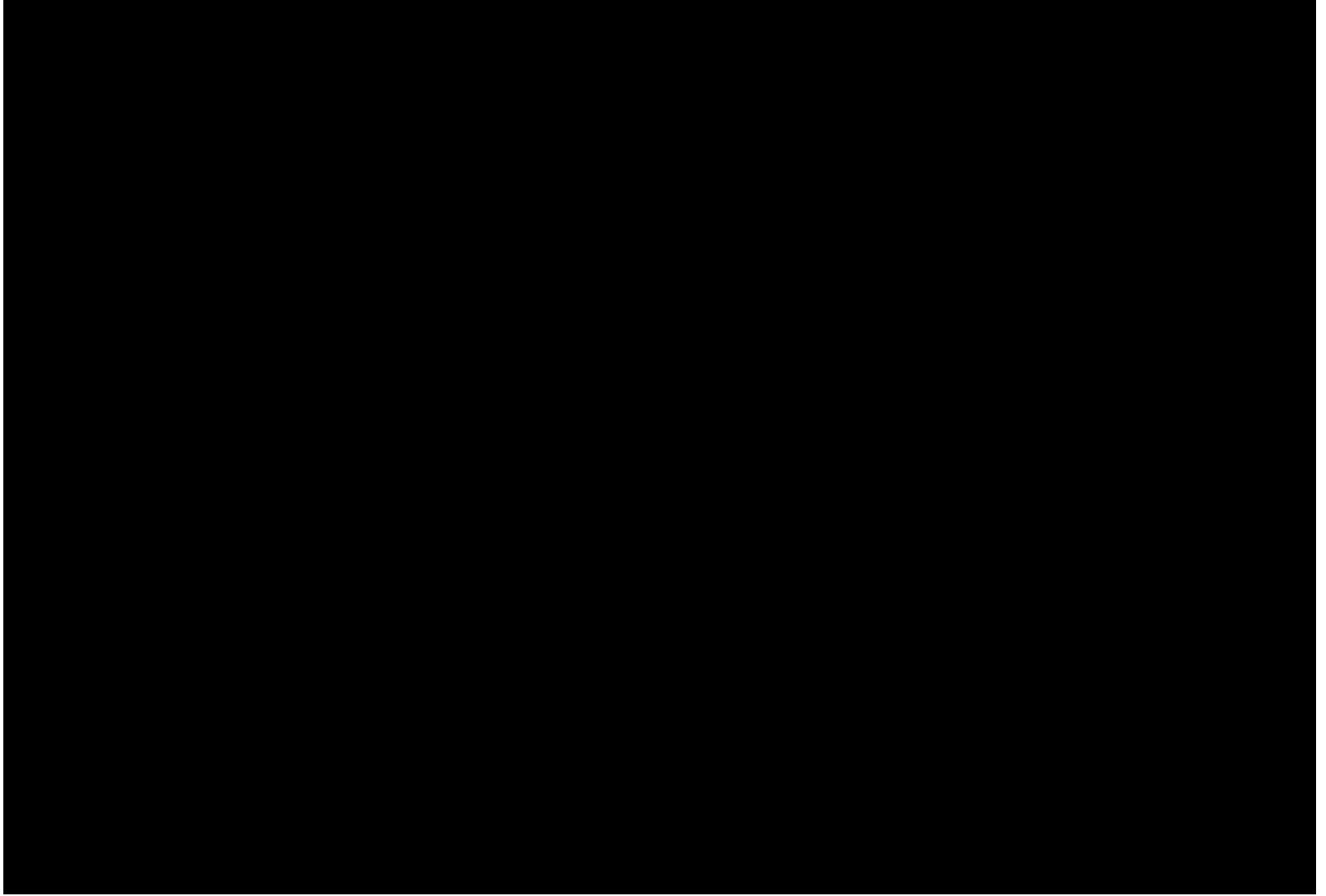
# Human Performance

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# Herding Cats...

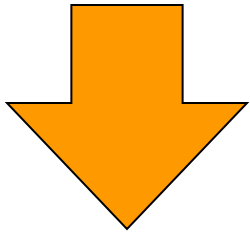


**So.....**

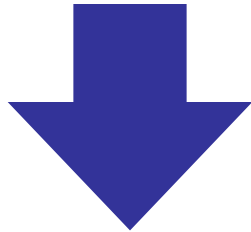
**What IS  
Human Performance?**

# What is Human Performance?

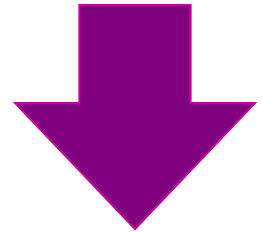
$$P = B + R$$



PERFORMANCE



BEHAVIORS



RESULTS

# Five Principles of Human Performance

1. People are fallible, and even the best make mistakes.
2. Error-likely situations are predictable, manageable, and preventable.
3. Individual behavior is influenced by organizational processes and values.
4. People achieve high levels of performance based largely on the encouragement and reinforcement received from leaders, peers, and subordinates.
5. Events can be avoided by understanding the reasons mistakes occur and applying the lessons learned from past events.

# What can be concluded from these examples?

- Erasers



- Spot removers

- Delete buttons



# Is an Error About to Happen?



SO, ... HOW'S YOUR DAY GOING?

# What is Human Performance?

Operationally, Human Performance could be described as:

- **Protecting our Plant**
- **Protecting Others**
- **Protecting Ourselves**

*From Ourselves*

# Misunderstandings about Human Performance

- No events, no HU problem
- Errors cause significant events
- Errors are bad

# Where We are Going

Focus on *Behaviors, Defenses, Accountability*

- Behaviors - How you and I perform on each task
- Defenses - barriers to an injury or error
- Accountability - holding ourselves and our co-workers responsible for achieving high standards

# What are We Doing to Get There

## Leadership and worker behaviors:

- Aligned fundamental behaviors
- Pre outage HU/IS challenges to contractors
- First week outage fleet manager team assists
- Error/Event challenge meetings.
- Eliminating field hazards
- Implementation of the Task Safety Analysis (TSA) process
- Work/weather curtailment process

# **Mastery of Fundamentals**



# Leadership Fundamentals

## Nuclear Safety

- Recognize and adhere to all regulatory requirements
- Ensure the plant is operated safely, giving safety and quality priority over schedule and cost
- Identify and report problems promptly to your supervisor
- Write a condition report when problems or potential problems are identified
- Perform thorough apparent, common and root cause evaluations
- Implement timely corrective actions
- Determine effectiveness of corrective actions

## Industrial Safety

- Be responsible for your own safety
- Adhere to safety rules, postings, barriers and alarms
- Identify any unsafe practices and behaviors
- Maintain a safe and clean work space
- Mitigate the hazards in your work area including travel path
- Use the right tool for the job
- Ensure equipment is safe. Do not bypass safeguards.
- Wear PPE appropriate for the job
- Promptly report all injuries and near misses
- Use and store chemicals properly

## Radiological Safety

- Know RWP requirements
- Follow written (RWP & postings) and verbal RP instructions
- Minimizing dose by applying practices of time, distance, and shielding
- Monitor your exposure and know your cumulative exposure
- Know work area dose rates and contamination levels
- Work within limitations agreed to by RP: task & location
- Properly don, wear and remove contamination control garments
- Practice contamination control techniques by using barriers, appropriate PCs, and avoiding skin contact
- Adhere to radiological boundaries

## Personal Responsibility and Accountability

- Take responsibility for the results of your actions and behaviors
- Take responsibility for the success of the job you are assigned
- Take responsibility to coach unsafe behaviors of coworkers
- Improve safety, human performance, and processes through the ECI program
- Expect and be receptive to feedback from field observations
- Ensure you receive routine formal appraisals
- Immediately resolve issues under your control

## Procedure/Work Instructions

- Ensure procedure contain *defense in depth*
- Use the latest revision of a *procedure* or work document
- Follow procedures/work instructions as written and in accordance with Level of Use Category
- If procedure can not be followed as written, stop place work in a safe condition and contact supervision for resolution
- Review the procedure steps, limitations, and anticipated results before beginning work
- If unanticipated results occur, stop and notify appropriate supervision
- Placekeep* using the Circle/Slash method
- Use *Placekeeping* for Continuous Use procedures and when written instructions are referred to directly to perform an action
- Use *Peer Checking* when a second person needs to verify an action before it is taken
- Use *Concurrent Verification* when a second person needs to verify before, during and after an action is taken
- Use *Independent Verification* when a second person, separated by time and space, needs to confirm the status of a system or component.
- Your signature documents that you have performed the task completely and accurately

## Individual Use HU Tools

- Perform a *Job site Review* of the immediate work area each time the job site is accessed. Take action to reduce / eliminate hazards and error traps
- Apply a *Questioning Attitude* to the task at hand to identify areas of confusion or concern. Ensure questions or concerns are properly resolved before work begins
- Self Check* when performing a task that has the potential to impact the plant or personnel safety. Practice STAR performance Stop, Think (S.A.F.E.R.), Act and Review. If interrupted during the sequence, start the self check process over again

## Group Use HU Tools

- Practice *Effective Communication* ensuring information is clear and understood. Use 3-way communication when transmitting information which requires precise understanding. Use phonetic alphabet when communicating component, train, channel or procedure steps
- Perform *Pre-Job Briefs* prior to work activities, once per shift, and after extended delays. Use a graded approach to pre-job briefs based on consequence and complexity
- Perform *Turnover* when responsibilities are transferred between personnel. Perform a quality turnover in a written format (checklist, log, procedure steps, etc.) when possible
- Perform *Peer Coaching* to positively reinforce desired behaviors and correct behaviors that do not meet expectations.

## Training and Qualifications

- Attend training as scheduled and be on time
- Place papers on silent and do not answer pages unless there is an emergency
- Participate with a questioning attitude that stimulates class discussions and promotes understanding.
- Provide feedback to support training development and enhancements; Share relevant examples of in-field lessons learned
- Own and maintain qualifications
- Verify qualification prior to performing work

## Teamwork

- Cultivate atmosphere where questioning and participation is encouraged
- Seek and value input from stakeholders/team members
- Objectively consider input
- Treat others with respect
- Provide support when others need your input
- Professionally challenge positions/plans using standards, OE and your experience

## Work Management

- Identify deficiencies found in the plant
- Utilize resources (Eng., Ops, etc) to provide accurate detail in Work Request
- Come prepared and actively participate, as required, in T meetings
- Support preparation activities by the due date
- Champion unresolved deficiencies. Follow through on longstanding issues.
- Execute as scheduled. Follow the 10/30 rule when delays are encountered
- Provide documented feedback to improve future job performance

## 4 Key Platforms

- Trust, Fairness, Honesty, Integrity  
Foster trust by interacting with others honestly and fairly  
Demonstrate fairness by upholding standards equally and consistently  
Model integrity by your actions. Be fully engaged
- Be deliberate (actions under control). Follow the rules.
- Supervisors and Managers set and continuously reinforce high standards.
- Do what you say you are going to do.  
Be rigorous in completing actions as committed  
Communicate as soon as you know there are impacts to a commitment

# Common Fundamentals

## L1. Safety

- a. Safety is our number one priority
- b. Actively and aggressively promote nuclear, industrial and radiological safety
- c. Address with urgency any unsafe conditions or concerns
- d. Perform risk identification and assessment
- e. Practice conservative decision making
- f. Create an environment where problem identification and resolution is freely practiced

## L2. Alignment

- a. Establish a clear vision to excellence and identify gaps to the vision
- b. Align your organization and your peers around the vision and implementing strategies.
- c. Communicate expectations frequently utilizing a variety of methods.
- d. Timely communicate plant issues and the basis for major decisions.
- e. Share ownership of improving all aspects of the organization; not just your functional area
- f. Likewise, keep the entire team informed of your efforts and need for support
- g. Ensure site and fleet strategies are aligned
- h. Maintain positive and professional conduct within the leadership team
- i. Create an environment where employees are free to openly discuss issues with all organizational levels
- j. Celebrate important achievements to maintain organizational energy, alignment and engagement

## L3. Performance Monitoring

- a. Maintain focus on continuous improvement
- b. Maintain a performance improvement process which utilizes a variety of methods
- c. Ensure high quality work products
- d. Ensure performance indicators are beneficial and monitored closely
- e. Utilize assessments and benchmarking to identify program gaps
- f. Obtain both internal and external observations of performance
- g. Utilize operating experience to interrogate site vulnerabilities
- h. Develop realistic and actionable improvement plans
- i. Perform formal and frequent action plan reviews

## L4. Accountability

- a. Correcting performance gaps is essential and required
- b. Influence behaviors by (supervisor coaching):
  - Understanding the behavior standards
  - Spending time in the field on a regular basis
  - Looking for behaviors
  - Providing specific candid feedback
  - Documenting the feedback
  - Anchor good behaviors with positive reinforcement
  - Immediately correct behaviors that do not meet expectations
- c. Monitor individual behavior trends to validate behavior change
- d. Add structure to feedback using written documentation and regularly scheduled meetings
- e. Administer discipline fairly in accordance with MARC
- f. Acknowledge leadership shortfalls and communicate resolutions
- g. Meet commitments, ensuring quality responses and complete follow through

## L5. Operational Focus

- a. Understand your role in the safe operation of the plant
- b. Be aware of the condition of the plant
- c. Be responsive to operating needs and conditions
- d. Minimize safety system unavailability
- e. Demonstrate an understanding and awareness of critical operations performance indicators

## L6. Strategic Planning and Execution

- a. Establish structured planning and monitoring of key processes
- b. Establish a long term view and plan for achieving excellence by closure of identified gaps
- c. Establish clear ownership and due dates for priority improvements
- d. Establish critical oversight
- e. Challenge plans using cross-functional feedback
- f. Execute the work as planned. Aggressively challenge deviations
- g. Look ahead to planned activities ensuring proper readiness to execute

## L7. Employee Interface

- a. Understand the challenges employees face
- b. Actively solicit employee input; being responsive to their needs, opinions, and feedback
- c. Enlist employees in improving plant performance
- d. Remove roadblocks to improve performance
- e. Provide necessary resources to support job performance
- f. Be available and approachable
- g. Visibly recognize employees for excellent behaviors, success, and continuous improvement

## L8. Training and Development

- a. Own the basic and advanced qualification and training of your employees
- b. Utilize the Systematic Approach to Training to improve performance
- c. Identify employee knowledge gaps and actively work toward closing the gaps
- d. Provide meaningful opportunities for development
- e. Encourage cross-functional team participation to broaden experience
- f. Collaborate with employee to set personal goals that are challenging but realistic, attainable and measurable
- g. Develop succession plans commensurate with employee talents and ambitions
- h. Create an environment where continuous teaching/learning is the norm

## L9. Innovation

- a. Create a work environment that stimulates innovation
- b. Support change initiatives by allowing participation, time, and resources
- c. Encourage multidiscipline teams to create ownership and promote teamwork
- d. Recognize teams and individuals for their efforts

# Departmental Fundamentals

## Chemistry Department Fundamentals

### CY1. Sample Integrity

- a. Ensure sample points are purged and recirculated to obtain representative samples
- b. Ensure system configuration is maintained throughout the sampling process

### CY2. Analysis & Data Evaluation

- a. Segregate work areas for processing radioactive and non-radioactive samples
- b. Maintain proper analytical techniques during measurement and analysis
- c. Ensure laboratory and quality control program data is reviewed, evaluated, and documented in a timely manner
- d. Perform data trending in a timely manner
- e. Use multiple and diverse indications to validate information.
- f. Effectively evaluate anomalies and indications of system problems
- g. Report abnormal conditions to supervision in a timely manner
- h. Take action on adverse performance trends

### CY3. Corrosion Control

- a. Have a low threshold for identifying and addressing chemistry problems.
- b. Maintain guidance for corrosion control
- c. Maintain guidance for radiation field control

### CY4. Recordkeeping

- a. Maintain at a level of detail to allow reconstruction of work activities by personnel that do not have benefit of face to face discussion of the activities
- b. Create records that are legible, accurate, complete, and understandable

# What are We Doing to Get There

**Procedures** - Evaluating, simplifying, clarifying, aligning.

**Some examples include:**

- EN-HU-101 “Human Performance Program”
- EN-HU-103 “Human Performance Error Reviews”
- EN-HU-105 “Human Performance Defenses”
- EN-IS-111 “General Industrial Safety Requirements”
- EN-IS-102 “Confined Space Program”
- EN-IS-108 “Working in Hot Environments”
- EN-IS-114 “Fall Protection”
- ADM-0099 “Performance Improvement Using Fundamentals”

# What are We Doing to Get There

## Communications

Timely fleet messages to supervision and workers such as:

- Fleet errors, events, injuries
- Weather related issues
- Procedure change management
- Know when to stop

# What are We Doing to Get There

- Union Hall Distance Learning initiative
- New to nuclear process
- Fleet aligned supplemental worker HU training

# What are We Doing to Get There

## **More to come....**

- We are champions at using HU Tools.
- Focus on coaching, behaviors, defenses and accountability.
- Do not accept anything less than the best from yourself or your peers.
- It is expected that we challenge each other

# What are We Doing to Get There

**Personal challenges:**

**Do I know when to stop  
and do I STOP?**

**If I see it –  
Do I own it?**

**How do you identify which mode you are in?**

- 
- **SKILL- BASED**
  - **RULE-BASED**
  - **KNOWLEDGE-BASED**

# Skill-based Behavior

Behavior is associated with highly practiced actions in a familiar situation usually executed from memory **without significant conscious thought.**

# Skill-based Behavior

## Examples of Skill-based activities

- Opening or closing your front door
- Sports (golfing, biking, skiing, bowling)
- Driving a vehicle
- Typing



# Rule-based Behavior

Behavior based on selection of *stored rules* in an **IF** (symptom X) **THEN** (Situation Y) **logic recognition**

# Rule-based Behavior

## Examples of Rule-based activities

- Deciding whether to change your car's oil
- Responding to a smoke alarm
- Choosing answers for an exam
- Stopping for gasoline



# Knowledge-based behavior

Behavior in response to a **totally unfamiliar situation** (no skill, rule or pattern recognizable to the individual)

# Knowledge-based behavior

## Examples of Knowledge-based activities

- Taking a pop quiz
- Being downtown at night in a part of town you have not visited before



# What type occurs here?



# What type occurs here?



# What type occurs here?



# Adequate Communications

What if you want great performance?



# **“Faint Signals”** worker

I know this is in the turbine building but...

I have not done this  
in several years..

Maybe if...

I think this is it...

Just give me the work package and I'll  
let you know when I'm done...

I know I'm qualified but...

Most mechanics could do this in their sleep..

How long will  
this briefing  
take, I have  
lunch to worry  
about!

*I've done this hundreds of times....*

*I was doing this while you were still in grade school...*

# ***“Faint Signals”*** *supervisor*

**With your deep experience this shouldn't take very long.....**

**You understand this, RIGHT?**

**I'll verify your tag out to get this going quicker...**

**Make sure you tell the Shift Manager you're working on what puts us in a tech spec action statement....**

**I trust you'll do....**

**Do what it takes to get this done....**

# ***“Faint Signals”*** *manager and above*

Let's assign our best guy to get this done quickly....

Per the morning call the grid can use all we can provide.....

What do you call the second place person in a NASCAR Race? The First loser!

This never took this long when I was maintenance superintendent...

(After a consequential event)

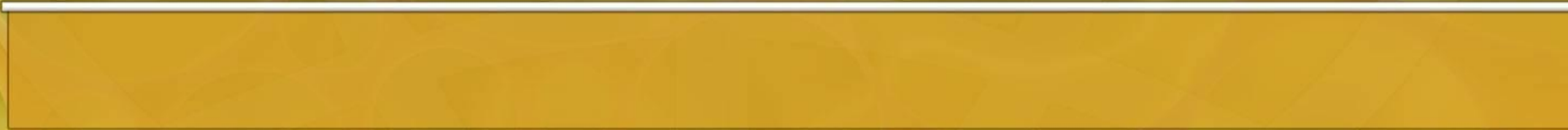
“Who did what to ....?”

“Who caused this ...?”

as consistent questions



# Inattention Blindness



# Assumptions

- Occur more often, when people experience **uncertainty**
- Outfall of **unsafe attitudes** and **inaccurate mental models**
- Often treated as fact

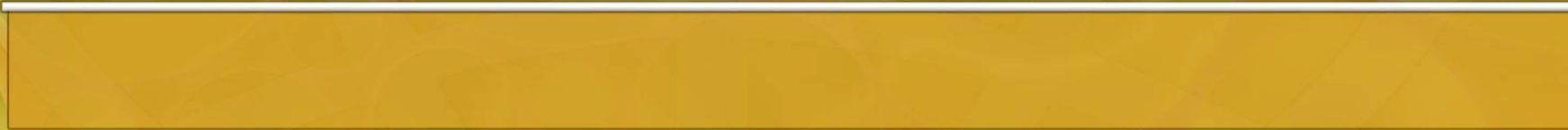
# Assumptions

People *judge risk poorly*, typically underestimating it.

People frequently overestimate the *ease of success* and their *ability to perform* ...

*What feels safe may, in fact, be dangerous.*

# **Coaching for Excellence....**





# Coaching is Proactive

The act of:

- Observing
- Engaging
- Reinforcing
- Correcting

***BEHAVIORS***

# Coach

## Cares, Observes, Analyzes, Communicates, Helps

- Is on the field with the players
- “Cares” about the success of the team and individual
- Recognizes their success or failure is dependent upon the behaviors of their players
- Continuously models the desired behaviors
- Good players win games – not good plays



A Coach helps develop good players that will make good plays

# Key Attributes of a Good Coach

- Chooses to make a Difference
- Sincerely Cares
- Coaches to be Helpful
- Reinforces Desired Behaviors
- Coaches Undesired Behaviors
- Demonstrates Courage in the face of Adversity

# ATTITUDE vs. BEHAVIOR

- What is the difference?
- What can you coach?
- Can we see or observe attitude?
  - Attitude is perceived
- We can “observe” and impact behaviors

**Coaching is all about shaping behaviors.  
Reinforcing desired – coaching  
undesired.**

# Receiving Coaching

- Welcome Constructive Coaching
- Choose How To Use The Coaching
- Accept Coaching At Face Value
- Don't Justify Inappropriate Behavior
- Don't Sulk/Withdraw

**You were coached because  
someone cared**

## In Closing...

In a high performing organization, ***“Everyone is your peer when it comes to coaching.”***

# Entergy HU Vision

***When others want to know how to be the best, they must visit Entergy as part of their strategy to improve.***

# River Bend Vision

***We are The Model of peak performance that all other plants strive to imitate.***



# Attitude

“The longer I live, the more I realize the impact of an attitude on life. Attitude, to me is more important than education, than money, than circumstances, than failures, than success, than what other people think or say or do. It is more important than appearance, giftedness or skill. It will make or break a company...a church...a home. The remarkable thing is we have a choice every day regarding the attitude we will embrace for that day. We cannot change the inevitable. The only thing we can do is play on the string we have, and that is our attitude. I am convinced that life is 10% what happens to me and 90% how I react to it. And so it is with you. We are in charge of our attitudes.”

*A message passed from LSU Strength Coach Tommy Moffit (originally by Charles Swindoll) to put attitude in perspective.*