

## MTII Case Study Instructions

We are in a constant state of growth where we are moving from our current state and level of understanding to a future state where we will hopefully possess a deeper understanding of the BRC principles and how to apply them.

The following case studies have been provided to be used in an exercise to stimulate thought and conversation that link content (what we see and hear on the range – our sensory input) to context (SAM: Safety, Adult Learning Principles, and Motor Skill Principles – the framework that the BRC principles are built upon) in a process that we call “content to context threading”.

Review each case study and assess how the circumstances do or do not honor the SAM process. Identify which SAM elements are affected and offer ideas on how you might handle each situation differently in order to be better aligned with the principles. Support your ideas with the information provided in the RCG, range cards, exercise rationales, Adult Education Model, and Motor Skill Principles.

Submit your findings to Steve Zarbatany at [spz@msi5.com](mailto:spz@msi5.com) in order to receive feedback.

# The Adult Education Model

**The need to know.** Adults need to know why they need to learn something before undertaking a learning experience...the first task of a facilitator of learning is to help learners become aware of the need to know.

**The learner's self-concept.** Adults have a self-concept of being responsible for their own decisions, for their own lives. They are capable of self-direction. They resent and resist situations in which they feel others are imposing their wills on them. An effective facilitator will assist the learner transition from dependent to self-directing learners.

**The role of the learner's experiences.** In a group of adults there will be a wide range of individual differences and experiences. The effective facilitator taps into those differences and experiences by group discussions, group exercises, peer-helping activities, etc.

**Readiness to learn.** Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations.

**Orientation to learning.** Adults are life-centered in their orientation to learning. Adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems that they confront in their life situations.

**Motivation.** All normal adults are motivated to keep growing and developing in areas that are applicable to them as individuals.

# Classroom Concepts & Motor Skill Principles

from the MSF Basic *RiderCourse* RiderCoach Guide

## Classroom Concepts

- Learning is voluntary; that is, participants cannot be forced to learn material that is not relevant or meaningful to them.
- Mutual respect is demanded, not by the expertise of a RiderCoach, but by empathy and a sincere interest in participant learning.
- There must be a high degree of reciprocal trust and respect, and there is a balance between caring and challenging.
- RiderCoaches and participants share a mutual goal: safe, responsible motorcycling.
- Past experiences form the basis of new learning.
- The instructional environment should be high challenge and low threat.
- RiderCoaches must be able to adapt to a variety of circumstances and be creative in facilitating instruction.
- Riders should attribute success to their own effort and ability, rather than the instruction/coaching of a RiderCoach.

## Motor Skill Principles

- Motor skills are best developed when taught in a whole-to-part manner. It is best to learn whole skills first, later to refine that skill with practice and coaching.
- Motor skills are best developed if initial learning occurs with an emphasis on control instead of speed.
- A primary way to learn a motor skill is to practice in a safe environment. Practice provides feedback (knowledge of results) which can be enhanced by appropriate coaching.
- Gross motor skills (those utilizing major muscle use) should be practiced before fine motor skills are developed.
- Mental practice has value in motor skills learning, but only after experience and familiarity with the actual motor skill.
- Too much information, or over-coaching, can inhibit the development of motor skills.
- Extensive preliminary verbal instruction inhibits motor skills learning.
- Technical verbal instruction before actual practice usually does not improve motor skill development.
- Motor skills are best learned if acquired naturally as opposed to being forced.
- Motor skills are retained better if a learner practices in a safe environment without distractions which can intrude on the perceptual-motor process.
- Coaching is most effective in an environment of minimal stress and tension.
- Novices learn best if first given a gross motor skill outline instead of details of movement.

## Exercise 2 Using the Friction Zone

This exercise is designed to acquaint riders with the procedures and practices to start out, stop, and operate at low speed in a straight line. There are 3 parts: a group rock with individual assistance as needed, power walking (straddle walking with power), and straight-line riding. Turnarounds are accomplished in neutral. Simulated practice is used for emphasis in use of the friction zone. The exercise is ended by stopping riders in the middle of the range as a setup for the next exercise. Each RiderCoach observes and coaches half of the riders. It is important that each rider becomes skilled in clutch operation and braking procedures before proceeding.

**Notes:**



## Exercise 2

25 minutes – Riding Demo, *Simulated Practice*, 3 Parts

1. Read objective
  - To be able to use the friction zone with control
2. Explain range setup
  - Individual lanes back and forth across range marked by 2 cones
3. Provide instructions
 

**Part 1 – Group Rocking**

  - On signal, mount and start engine
  - On signal, squeeze clutch lever and shift to 1st gear
  - On signal, use friction zone to rock back-and-forth in place repeatedly
  - Do not release clutch lever fully
  - Use minimal throttle

**Part 2 – Power Walking**

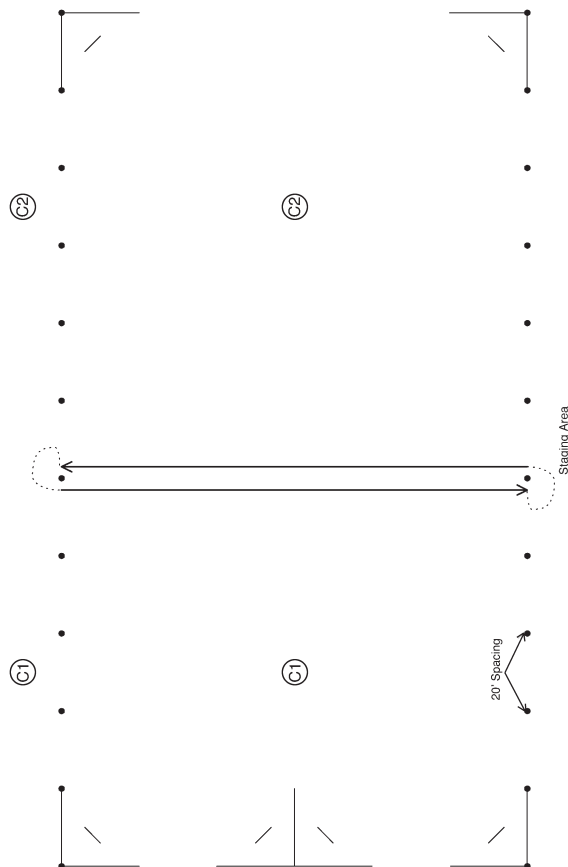
  - On signal, power walk in path of travel
  - Keep feet on ground, not on footrests
  - Upon reaching target cone, stop using front brake smoothly, shift to neutral (releasing clutch lever very slowly to be sure), and raise left hand
  - On signal, turn motorcycle around
  - On signal, shift to first and repeat power walk, stopping next to target cone
  - Repeat as signaled

**Part 3 – Riding**

  - On signal, ride from start cone to target cone
  - Power walk until speed is stable
  - Use both brakes to stop, putting left foot down first
4. Provide demo of posture and 3 parts
  - Note evaluations and provide signals
    - Keep right wrist flat and use steady throttle
    - Keep clutch lever covered
    - Keep head and eyes up
    - Keep knees against tank
    - Don't cover front brake lever while using throttle
    - Maintain a safety margin
5. Provide *simulated practice* of friction zone

## Using the Friction Zone

6. Conduct exercise as a group
  - During Part 1 – Group Rocking, watch riders needing individual coaching. Ensure all riders have good friction zone control before moving to Power Walking
7. Stage riders
  - In middle of range
  - Half in each direction to permit left turn to start next exercise
8. Debrief



## Exercise 4 Shifting & Stopping

This exercise is designed to have riders learn to shift gears. This is accomplished in a straight line. Added to the path of travel is a perimeter turn and 2 clutch-control lanes. The perimeter turn serves as an introduction to turning more sharply, and the clutch control lanes provide the opportunity for riders to fine-tune clutch/throttle coordination. A subtlety of this exercise is that a “mix” pattern is used, and riders must cooperate in merging with each other prior to entering the middle of the range, which is used for clutch-control practice. RiderCoaches coach the first ride in the middle of the range then move to focus on the shifting process. For most of the exercise, they coach the shifting and stopping portion of the exercise, and keep a watchful eye on the perimeter turns, clutch-control lanes, and stopping in line. Riders are likely to stop in a slight turn as they stop to wait their turn in line. This technique was already experienced in Exercise 3, Starting & Stopping Drill. Utilizing this path of travel provides significant practice time in the development of basic skills, and minimizes wait time in lines. Riders are kept busy with basic skills development activities. Specific coaching is not provided in the middle of the range unless a safety problem exists—a rider develops on his/her own as the results of the manipulation of the controls provides the necessary feedback. A parking area is used to stage for the first time in this exercise. It is important that each rider demonstrates overall control and clutch use, shifting and braking before proceeding. Additionally, each rider should have the ability to recognize and maintain a safety margin.

### **Notes:**

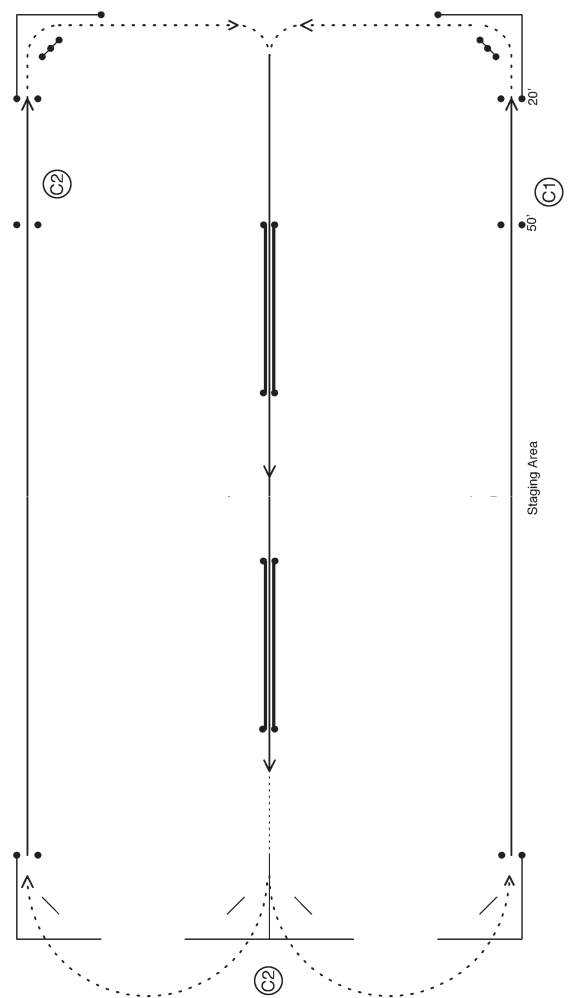
## Exercise 4

30 minutes – Riding Demo, *Simulated Practice*

1. Read objective
  - To be able to shift gears and stop smoothly
2. Explain range setup
  - 2 clutch control lanes down the middle of the range,
  - and a shift/stop lane on the long sides of the range
  - A turn after stop
3. Provide instructions
  - On signal, ride through the 2 clutch-control lanes, and stop at the beginning of a stop/shift lane
  - Keep a safety margin between riders while riding and while in line
  - On signal and one at a time, ride down the lane, shifting to 2nd gear, releasing clutch
  - As you approach the stop point, shift to 1st gear and stop between last set of cones
  - Do not release clutch after downshifting to 1st gear
  - Remain stopped for coaching
  - On signal, slowly ride through turn and proceed to the middle to practice the clutch control lanes
  - Turn and get in shorter line
  - On signal, ride to group parking area
4. With riders at stop point, provide demo
  - Include parking area
  - Note evaluations and provide signals
    - Keep eyes up
    - Shift smoothly and precisely
    - Stop smoothly using both brakes at the designated point
    - Do not release clutch after downshifting
    - In clutch control lanes, work toward improving slow speed clutch control and balance
    - Use outside-inside-outside path on perimeter turns
    - Maintain a safety margin
5. Provide *simulated practice* of shifting
6. Conduct exercise
  - Coach riders in first path through clutch control lanes, and divide equally to stop point for outside lanes
  - Encourage riders to complete perimeter turns after stop

## Shifting & Stopping

- Observe each rider through perimeter turn before signaling next rider
  - Note skill development as riders practice clutch control lanes
7. Stage riders in parking area
  8. Debrief



## Exercise 5 Adjusting Speed & Turning

This exercise is designed to allow riders develop the basic skills of adjusting speed and turning. This is the first exercise to provide extended opportunities to ride without having to stop. Here the fun factor increases as riders enjoy the benefits of acquiring basic manipulative skills. Riders may use 2nd gear as this provides smooth operation with less throttle sensitivity. The perimeter is used extensively at first, then riders are coached into the weave pattern. The weave pattern is different on each side; one is a 20'-weave and the other is a 30'-weave. This varies the control inputs and feedback provided the riders; that is, they practice and gain feedback in multiple paths of travel. RiderCoaches are active in their assessment of safety and skill development, but allow riders the freedom to develop control adjustments. The exercise is reversed. This can be accomplished in a variety of ways, but one suggestion is to stop riders in a straight path and then perform a U-turn (providing yet another opportunity to develop basic skill in the context of real riding). Riders have already performed a similar maneuver when they practiced the perimeter turn from the stop and turned up the middle in Ex. 4, Shifting & Stopping. It is important that each rider demonstrates an ability to adjust speed and maintain overall control when turning before proceeding.

### **Notes:**

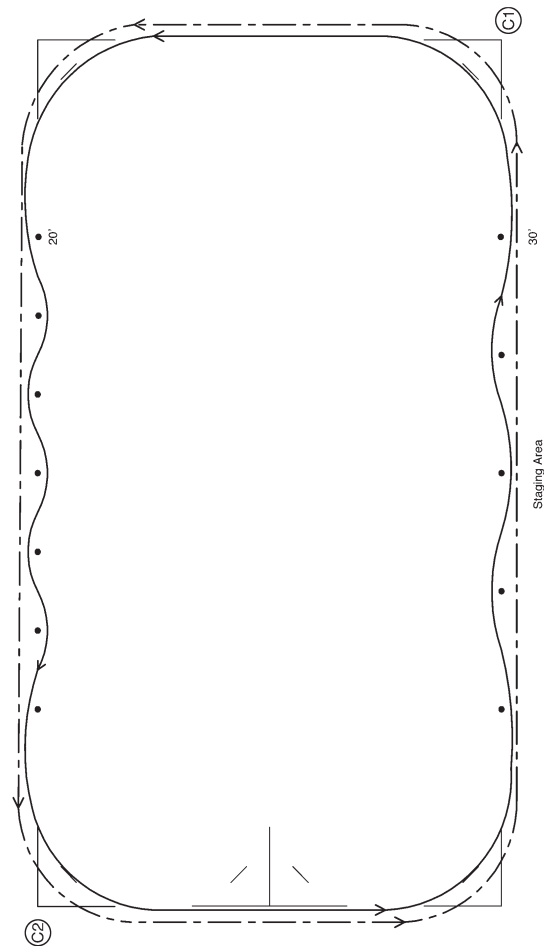


## Exercise 5

30 minutes – Riding Demo, *Simulated Practice*, Reverse

1. Read objective
  - To be able to adjust speed to make smooth turns and negotiate weaves
2. Explain range setup
  - Cones around perimeter of range, 20' apart on one side and 30' apart on the other
3. Provide instructions
  - On signal, ride the perimeter outside the cones
  - Maintain an adequate following distance
  - Speed up as possible in the straightaway and slow for the corners
  - Do not squeeze the clutch when slowing
  - After some time and on signal, begin to weave around the cones
  - On signal, stop in a line to reverse direction
  - On signal, stop in line to reverse and ride to the parking area
4. Provide demo
  - Note evaluations and provide signals
    - Maintain precise control
    - Slow with both brakes before corners (no clutch squeeze)
    - Use throttle smoothly
    - Keep right wrist flat without covering front brake
    - Maintain a safety margin, particularly in following distance
5. Provide *simulated practice* of steady throttle with steering input
6. Conduct exercise, with reversal of weaves
  - Provide extended time on perimeter
7. Stage riders in the parking area
8. Debrief

## Adjusting Speed &amp; Turning



## Exercise 9 Stopping Quickly

This exercise is designed to allow riders to develop their quick-stop capabilities. The stop point is several feet prior to the perimeter turns to provide another scenario from which turns must be made in real-world situations. (Earlier in Exercise 4, Shifting and Stopping, the distance was 20' to create a "slow-ride" through the perimeter turn. Here a greater approach distance is provided with the idea that braking adjustments may be required to complete the turn. Also, note that the middle cone inside the perimeter turn is moved slightly.) A feature of this exercise is that a crisscross traffic pattern is used in the middle of the range. Riders practice pause-n-gos while creating a gap for cross traffic. Another feature of this exercise is that it has two parts: one is to allow riders to stop as they pass a cue cone; the other is to stop on signal by a RiderCoach. The latter is done to provide riders with an "on cue" scenario to make a quick stop, developing the skill to a deeper level. This exercise uses simulated practice to emphasize the quick stop technique. As with all exercises, riders are encouraged to start at lower speeds and increase speed as skill develops and comfort levels increase. RiderCoaches manage the exercise from the stopping areas, watching the riders as they complete the perimeter turn and crisscross in the middle to get back in line. Also, they coach proper approach speeds appropriate for individual skill levels. It is important that each rider demonstrates an ability to stop quickly and smoothly before proceeding.

### Notes:

**Exercise 9**

30 minutes – Riding Demo, *Simulated Practice*,  
2 Parts

1. Read objective
  - To be able to stop quickly and safely in shorter distances
2. Explain range setup
  - 2 lanes on each side of the range
  - 2 crossed pause-n-gos in middle of the range

3. Provide instructions

**Part 1 – Stop using cue cones**

- On signal, ride down the middle of the range through the crossed pause-n-gos
- Ride to a start point for stop lane
- On signal and one at a time, approach stopping area at about 15 mph in 2nd gear
- Stabilize speed early
- As front wheel passes the cue cones, downshift keeping the clutch squeezed, and make a quick stop using both brakes
- Once coached, make the perimeter turn and ride through the crossed pause-n-gos

**Part 2 – Stop on RiderCoach signal**

- When a RiderCoach moves inside stopping area, stop quickly on command

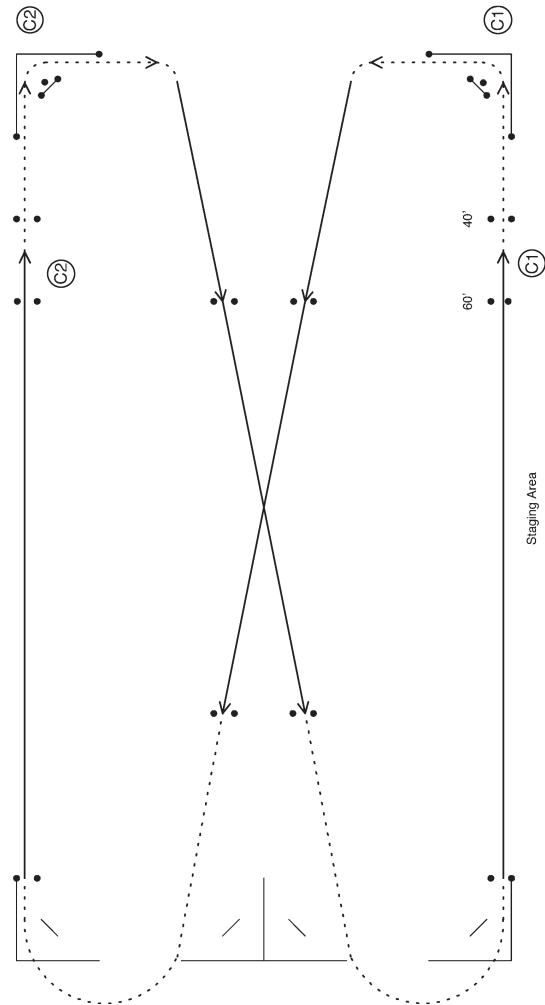
4. With class at stop point, provide demo
  - Note evaluations and provide signals
    - Keep head and eyes up
    - Use brakes firmly, not grabbing the front brake or locking the rear brake
      - If rear wheel locks; use less pressure next time
      - If front wheel locks, immediately release the lever and reapply with less pressure
    - Shift with precision
    - Maintain a safety margin
  - Tell riders to keep their speed low and to use soft pressure on the front brake lever for the first attempts

5. Provide *simulated practice* of stop procedure

6. Conduct exercise
  - To start, distribute riders evenly
  - Part 1: use cue cones
  - Part 2: use stop signal

**Stopping Quickly**

7. Stage riders in parking area
8. Debrief



**End of Level I**

## Exercise 12 Cornering Judgment

This exercise is designed to add cornering finesse as it requires additional rider judgment. The path of travel includes lanes on the long sides of the range and two exit lanes in the middle. Riders practice the slow/look/press/roll technique as they adjust the entry speed for the exit lane they choose. RiderCoaches have riders start individually and coach by correction as needed. The exercise is reversed to allow practice in both directions. It is important that each rider demonstrates overall motorcycle control when adjusting speed for cornering before proceeding.

### Notes:

## Exercise 12

30 minutes – Riding Demo, Reverse, *Simulated Practice*

1. Read objective
  - To be able to judge entry speed and corner skillfully
2. Explain range setup
  - A path down the sides of the perimeter, and 2 gates in the middle
3. Define entry speed
  - The speed at the beginning of a turn that allows throttle roll-on throughout the turn
4. Provide instructions
  - On signal, ride around perimeter to the start position
  - On signal and one at a time, approach the cue cones in 2nd gear about 15 mph
  - Prior to cue cones, slow to a suitable entry speed
    - For farther gate, stay in 2nd gear and slow to entry speed without squeezing clutch
    - For closer gate, consider downshifting to 1st gear prior to entry cone
  - Look through turn and maintain or increase speed through a gate
  - Alternate gates with each revolution
  - Proceed to end of line unless signaled by a RiderCoach
  - The exercise will also run to the right
5. With riders at cue cone, provide demo
  - Note evaluations and provide signals
    - Shift smoothly
    - Use slow, look, press, roll technique
    - Control speed
    - Maintain a safety margin
6. Provide *simulated practice*
  - Look and press
7. Conduct exercise, with reversal
  - Higher-geared motorcycles may need to stay in 1st gear for both gates
  - Run in both directions, repeat as necessary
8. Stage riders in parking area
9. Debrief

## Cornering Judgment

