Common Perceptions

- Kick with minimal knee bend
- Kick within the body line
- More rotation is better
- The hips lead the rotation
- Breathe with the body rotation
Russell’s Perspective

• Observe and gather info
• Teaching progression
• Freestyle- the most complex technique topic
  – Everything inter-related
• Maximize propulsion
  – Optimize propulsive movements
    • #1 Pull
    • #2 Kick
  – Shape the rest of the stroke around pull + kick
Scope of Clinic

✅ Arm Mechanics

- Everything else!
  - Kicking
  - Body/Head position
  - Rotation
  - Breathing
Kicking

- The kick is propulsive
- Movement originates from the hip joint
  - Knee & leg moves forward
- The power comes from the extension of the legs (quads)
- Knee bend sets up the extension/power phase
Kicking
Extend then upkick
Kicking

- Upkick is important
- Keep feet mostly in the water
- Ankle flexibility helps
The Arm Stroke

• Arm extends in front of shoulder
• Hand path traces the side of the body
• Arm recovery swings to the side
• Arm entry drives forward
Rotation

• Rotating onto your side
  – Does NOT reduce drag
  – Can HURT the kick and the arm stroke

• Rotate forward!
  – Not side to side
  – Tight pivot motion, not slow rotation

• Shoulder/Arm should stay to the side of face

• Hips rotate same amount & time as shoulders
Rotation

About 30 degrees to each side underwater
Breathing

• Late breathing is the most common flaw that I see
• Most swimmers turn to breathe naturally when:
  – the non-breathing arm enters
  – the shoulders rotate
• That’s late!!!
The Late Breath

Starting Late

Returning Late
Breathing

- Late breath leads to over-rotating on the non-breathing side
  - Bad catch
  - Kick hesitation
Breathing

• The ideal breath:
  – Head stays low
  – Not leaning too much on non-breathing side

• Breathe early!

• Turn the head to lead the body rotation
  – Going into the breath
    • Initiate head turn before the opposite arm enters the water
  – Coming back from the breath
    • Head returns back in line with body before the breathing arm enters the water
    • Try to see the catch of the opposite arm

• Breath should not impact stroke tempo!
Head & Body Position

- Hips at the surface
- Head in line with the body, at the surface, eyes looking down, water hits the top of the head
  - Difficult to do in crowded lanes
  - Most of the elite have eyes slightly forward
- Higher head position could benefit the entry and catch
  - Hip position should not be compromised
Head Position
Body Position
Additional Resources

• Previous webinars
  – Freestyle Arm Stroke
  – Rotation
Additional Resources

- The Race Club (www.theraceclub.com)
- GoSwim (www.goswim.tv)
- Mike Bottom – Three Style Freestyle
- YouTube
For more information:

• Tips & Training
• High Performance Tips