II. String Crossings

A. Elbow moves to new string level

B. Moderate to fast tempos: There is a decrease in upper arm and forearm motion as the tempo increases.

C. Wrist and fingers are flexible, allowing hand to:
   - raise and lower for each string level (vln/vla)
   - move forward and back for each string level (cello/bass)

D. String crossing motion is circular

E. There is a decrease in motion as the tempo increases: first from the upper arm, then the forearm, then the wrist, and finally from the hand

String Crossing Teaching Strategies

A. Raise and Lower the hand

1. pencil in bow tip
   Same position as bow direction changes, but flex fingers up and down instead of back and forth, raising and lowering bow

2. over shoulder
   Upper strings – place bow over shoulder with pencil in tip and raise and lower bow levels using finger flexes – simulate all string levels

3. on strings - silent
   Place bow on strings and raise and lower bow levels using finger flexes but without moving bow back and forth

4. on strings - audible
   Move bow back and forth between two different strings using finger flex, hand, and forearm motion – more motion for slow tempo, less motion for faster tempo

B. Bridge/ Fingerboard Rocking
   Place bow on bridge and rock back and forth between any two, three or all four strings silently. Vary the position of the bow – frog, middle, tip to notice the amount of arm/hand/finger involvement

C. Follow the Leader
   Model string crossings in different parts of the bow and have students imitate, or have student model while you circulate around class, fixing positions, assisting flexing fingers, hands, etc.

D. Dot Crossings
Place signal dots on bows where crossing is desired and have students practice keeping the dot over the string

E. **Draw around a circular object**

   1. **clockwise**
      Down bow on a higher string and up bow on a lower for upper strings, opposite for cello and bass
   2. **counterclockwise**
      Down bow on a lower string and up bow on a higher for upper strings, opposite for cello and bass
   3. **large circles**
      Motion closer to the tip requires larger circles
   4. **small circles**
      Motion closer to the frog requires smaller circles
   5. **Slower crossings – larger motions and more arm motion**
   6. **Faster crossings – smaller motions and less arm motion**

F. **Finger Flex Checks**
   Random checks to see if students are flexing their fingers

G. **Sample Rote Exercises:**

   1. A String: 3 2 1 O 1 2 3
      D String: O O O O O O O O

   2. A String: O O O O O O O O
      D String: O 1 2 3 2 1 O