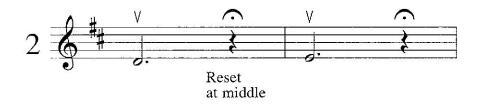
Crucial Bowing Skills

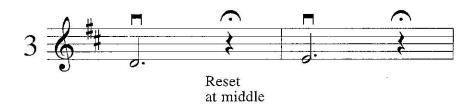
For use first on a single open string and later with a scale



Détaché: Middle of bow. On the string. One bow per note. Legato, not stopped. Beware frozen joints.



Middle to Frog: Keep bow 90 $^{\circ}$ to the string by bending at the wrist. Keep elbow relaxed.



Middle to Tip: Keep bow 90° to the string by opening the elbow.



Whole bows: Adapt with wrist and elbow as in exs. 2 & 3. Maintain 90° degree angle- bow to



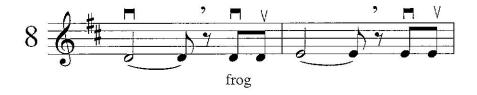
Whole, half, half: Use the whole bow on the long note and "localize" the short ones near the tip or frog.



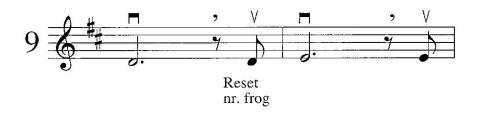
Staccato/ Martelé: Very small strokes at the middle with clear attacks and releases. Start with "T" or "K" sound. Martelé more accented.



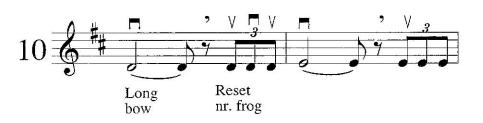
Retakes: Control the bow while lifting; relax after setting at frog. Limit the size of motions.



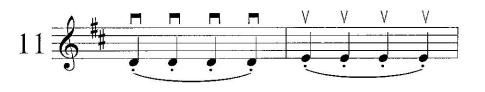
Retakes: Use a generous stroke for the long note; relocate near the frog for the 8ths.



Resetting for the pickup: Use a long down-bow; relocate near the frog for the pickup. Keep a steady beat, subdivide in 8ths.



Resetting for the triplet: Similar to example 9.



Slurred staccato/Linked/Hooked: Divide the bow equally and match articulation. When dashes are used, this stroke is called Louré.



Double ups: Finish the quarter on the string; start the first up from the string. In fast tempi the ups may come off the string.



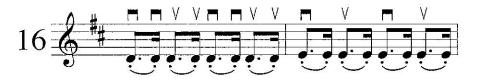
Double pull, double push: Divide lengths appropriately. Amount of stop to be decided. Subdivide by 8ths.



Hook the pickup: Save bow to make the 8th clear and precise. Subdivide by 8ths.



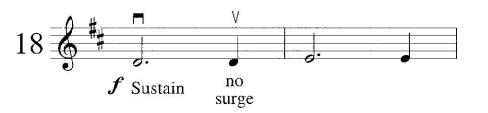
Chain pickups: Divide bow wisely. Be metronomically precise by subdividing by 16ths.



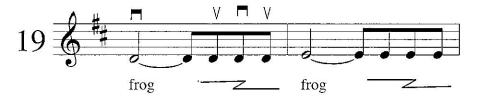
Dotted 8ths & 16th: Limit bow especially on the 16th. Subdivide by 16ths.



Dynamics against the grain: Practice at *grave* tempo. Save bow and vary bow weight especially at tip.



Control the upbow: Avoid an accent on the quarter; sustain the slow bow, lighten the fast up bow.



Zig-zag stroke: Slow, heavy down-bow; "fudge" the 8ths and return to the frog by the end of the bar. Even dynamic.



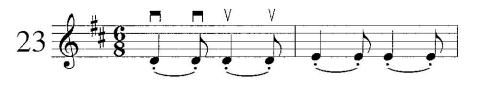
Spiccato: Stay near balance point; bounce off the string. Control height of the bounce. Explore "dry" vs "brushed"



Multiple down-bows: All at the frog. With energy.



Galloping rhythm: Use small strokes at the middle. Stop the 8th cleanly and noiselessly.



6/8 rhythm: Achieve a true 2/3 to 1/3 ratio; different than items 13 or 16 above. Divide bow length wisely. Subdivide by 8ths.



Fortepiano: Attack strongly then drop at once to *piano*. Control bow speed and weight.



Sautillé: Tiny strokes near the balance point; bow bounces itself. Only possible in faster tempi.