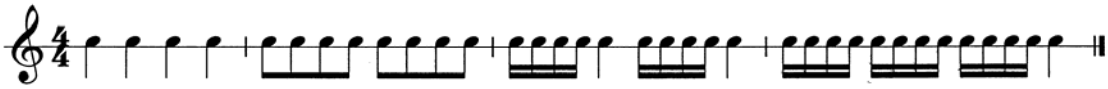
Clarinet Master Class
Mike Croom

I. EMBOUCHURE

- Hold Clarinet at 30° - 40° angle to body for correct pressure on reed.
- Wrap lips around mouthpiece like a rubber band.
- Keep chin down and flat, making a visible U shape.
- Put ½ of red part of lower lip over teeth.
- Put upper teeth directly on the mouthpiece.
- Push up with the thumbs; Press the mouthpiece against the upper teeth.
- Arch the back of the tongue upward in the "EEEE" position. (say "OOO-HEEE")
- Too much mouthpiece is an uncontrolled sound; too little mouthpiece restricts tone.
- Draw the upper lip down against the mouthpiece and in toward the upper teeth.
- The bottom teeth support the lower lip cushion; too much pressure causes poor response.
- The mouthpiece and barrel should produce a concert F#; mouthpiece alone produces concert C.
- The *Claricord Neckstrap* reduces right thumb strain and improves embouchure.

II. TONGUING

- The top of the tip of the tongue touches the bottom of the tip of the reed.
- Avoid using the middle or back of the tongue; no visible movement of the throat or chin.
- Use a light tongue stroke, letting the air do the work.
- Suggested syllables: To (short), De (legato), Ne (fast).
- Tonguing Drill for barrel and mouthpiece or mouthpiece alone:



- Player must tongue and hold pitch on concert F# (Ab) and concert C (D).

III. HAND POSITION AND FINGERING

- Position thumb rest at the base of the nail before the knuckle.
- Hold the left thumb at a 45 ° to the clarinet
- Use a rocking motion with the left thumb and forefinger to the throat tone and register keys.
- Keep the fingers naturally curved, covering with the pads (not ends) of the fingers.
- Keep the fingers close to the holes.
- Switch sides (L to R) (R to L) to avoid sliding between notes (B to C#, Low E to F#).
- Use the left hand C before and after fourth space Eb; use right hand B if D# follows C# in the pattern; this sequence also applies for low E, F#, & G#.

IV. AIR STREAM

- Clarinet uses generally fast, laser beam type air.
- Resistance changes between the registers requiring slight air stream adjustments.
- Some resistance or 'push back' should be felt while blowing air through the mouthpiece.
- Funnel the air from the lungs toward the mouthpiece; focus the air forward.
- Over-blowing and loose facial muscles will cause flat pitch.
- Lack of air support and over tightening facial muscles will cause sharp pitch.

V. TUNING

- Match pitch to a short series of notes or scale.
- Pull out the barrel, middle joint, and bell if necessary.
- Tuning to another player has better results than tuning to a machine.
- Key height adjustment is sometimes needed to adjust pitch of 'bad' notes.
- Work for a characteristic scale with consistent tone and pitch between registers.

VI. EQUIPMENT

A quality reed and mouthpiece is more important than the instrument itself. A plastic or intermediate wood clarinet can get a quality sound with a good mouthpiece, reed, and ligature.

A. Quality Mouthpieces (*Substitute a good mouthpiece for stock mouth piece when buying a clarinet)

Low Resistance:	Hite Premiere, Fobes Debut
Medium Resistance:	Fobes Nova, Vandoren B45, 5RV Lyre, M13, Pyne Polycrystal (Lucite)
High Resistance:	Garret D, Garret DL, Johnston J, Johnston D

***NOTE: Custom re-facings can be made to hard rubber mouthpieces, by mouthpiece refinishers, usually resulting in better tone and response.**

Low Clarinet:	Vandoren B44, Fobes Nova, Selmer C*
(Saxophone:)	Selmer C* S80), Selmer S90, Selmer C* LT (ALTO) (TENOR) (ALTO)

B. Mouthpiece Care

DO	**DON'T**
Clean after each use with a soft clean cloth	Pull a swab through it
Use a plastic mouthpiece cap	Boil it
Keep it away from extreme heat	Over tighten the ligature
Be careful with tip and rails	Drop or bump it
Use a soft bristled mouthpiece brush	Use another player's mouthpiece

C. Ligatures

Bonade (metal), Rovner (fabric), Luyben (plastic).

Avoid inexpensive metal ligatures; over tightening metal ligatures can cause the mouthpiece to warp; Old metal can stretch beyond holding the reed on correctly.

D. Barrels

Standard measure for clarinets is 66 mm, but a few models are equipped with a shorter barrel. The clarinet must tune up right at A440. It may be necessary for some players to change barrel lengths. Mixing barrel and instrument brands can cause additional problems due to different bore sizes. Tuning rings inserted in the barrel will fill the space in the bore when the barrel is pulled. The Buffet R-13 also works well with Robert Scott and Moenning barrels.

E. Reeds - The reed must be matched to the mouthpiece and player. Choose what has the best tone and pitch in all registers with some resistance. Cane density varies among brands; Vandoren cane is hard, Lurie and Hemke cane is soft.

Clarinet Reeds
- Vandoren 3 equals a Lurie 4 in strength.
- V12 tips are thin so a ½ size harder usually works.
- Wide mouthpiece tip openings work with medium strengths.
- Narrow tip openings works with medium-hard strengths.
- Good All-Purpose Reeds: Vandoren 3, Lurie 4, V12 3 ½
- Avoid 2 ½ strengths due to flat high notes.

Low Clarinet & Saxophone Reeds
- B44: Try Rico 3 or LaVoz MH (medium hard)
- C* and LT: Try Hemke 3 ½ or Vandoren 3

Oboe/Bassoon Reeds
- Try Jones Medium Hard – but thin the tips slightly.
- The perfect double reed has a MH (medium hard) heart and back with a medium soft tip.
- Soak 1 ½ minutes at break in.

REED RULES

1. *Buy a reed clipper and a Vandoren reed resurfacer.*
2. *Break in reeds slowly – short soaks and brief playing*
3. *Burnish the cane after break in.*
4. *Dry the reed off and store in a reed keeper after use.*
5. *Never leave a reed on a mouthpiece in the case.*
6. *Choose reeds that sound clear with enough tip strength for good pitch.*
7. *Soft, worn reeds play flat high notes; hard reeds usually play sharp.*
8. *If your mouth piece blows hard, try a softer reed.*
9. *If your mouthpiece has no resistance, try a harder reed.*
10. *If your reed is too soft, clip it or move it higher on the mouthpiece.*
11. *If your reed is too hard, thin the tip, resurface the table, or move it lower on the mouthpiece.*
12. *If the reed is out of balance, thin the thicker (darker) side with fine grit sand paper.*
13. *If you are usually flat, try a harder reed.*
14. *If you are usually sharp, try a softer reed.*
15. *Pick out reeds that have light colored tan cane.*
16. *Avoid yellowish – green cane or discolored streaks.*
17. *Look for the inverted V shaped heart against a light source.*
18. *Look for fibers that are evenly spaced to the tip of the reed.*
19. *Save the reeds that don't play at first – they may change over time.*
20. *Synthetic reeds do not produce the best sound.*
21. *Press the reed against the lay of the mouthpiece rails and tip.*

F. Instruments

Students have success with Selmer, LeBlanc, Buffet and Yamaha beginner, intermediate and professional models. There are other quality instruments available. Because of the difference in quality of some less expensive instruments, they are unable to be repaired and maintained locally, and may put the student at a disadvantage.

VII. INSTRUMENT REPAIR

Many playing problems can be traced to an instrument needing repair. Common Clarinet Repair Needs:

1. Bent keys, bridge keys, rods	11. Dry tenon corks
2. Keys need oil	12. Worn, leaking, or missing pads
3. Missing, worn corks	13. Dry bore (wood clarinets)
4. Swollen joints	14. Incorrect barrel
5. Long keys touching	15. Screws backing out or missing
6. Crow's Foot needs adjustment	16. Loose or missing case latches
7. Key height needs adjustment	17. Music folder in case
8. Loose, broken springs	18. No swab or cork grease in case
9. Spring tension too heavy or light	19. Surface cracks (wood clarinet)
10. Inconsistent ring height	20. Deposits in tone holes and mouthpiece