BASICS

Improving intonation

How can you be sure that your ability to discriminate between different pitches is excellent? How can listening be improved? One of the most immediate and lasting ways of improving intonation does not involve playing at all, but consists merely of a simple ear test.

The test could not be more straightforward: all you have to do is say which of two notes is higher or lower. It is made up of three stages, and takes just a few minutes.

While the test is an obvious thing to give a student when working together on intonation for the first time, everyone should try it. Apart from being fun to do, the point is that either you score 100% or you do not. If you do, it acts as a great boost to your confidence since you then know for sure that you have got an excellent ear. The tests prove to you that you can distinguish between the very slightest differences in pitch. You begin to trust yourself more, and this in turn allows you to concentrate all the more on the music without distraction.

If you do not score 100%, the beauty of these tests is that they very quickly sensitize your listening, focus your attention and force you into greater alertness, so that in no time at all you *do* score 100%.

Get a friend to play the notes for you. It can also be fun to turn the tables on a student and get them to give you the test. It can be as beneficial for them to do that as to take the test themselves.

Stage 1: Higher or lower?

Play two notes, first one and then the other, so close together in pitch that they are almost the same note but not quite.

All that the person doing the test has to say is: "The second note is higher/lower."

Having played the first note, stop; do not move your finger. Simply 'roll' the fingertip the tiniest distance on the string to move to the second note: do not lift the finger and place it again, and do not slide the finger along the string.

At first, play each note for about three seconds, with a silence of about three seconds between the two notes. Later, you might play each note just by touching the string lightly for a fraction of a second:



Stage 2: Silence between the two notes

Stage 2 is exactly the same as Stage 1, except that now you introduce a time delay between the two notes.

Play the first note; wait five seconds; play the second note. Then extend the silence: wait ten seconds between the two notes, fifteen seconds, and twenty seconds.

The person doing the test must make a mental 'recording' of the pitch of the first note, and keep playing it back to themselves while they wait for the second note. Then they must compare the pitch of the second note with the memory of the first note and decide whether it is higher or lower.



Stage 3: Distracter notes

In the last stage play a completely different note to act as a distraction between the two actual notes. First play one distracter note, then two, three, four, and so on. You can also play double-stops:



At each stage vary the test notes in as many ways as possible. Some people initially find certain ranges easier to hear than others, perhaps scoring better when the notes are low on the G string than high up at the top of the E, so cover every octave. The two notes do not have to be in tune themselves, e.g. they could be a fraction apart midway between a C and a C^{\sharp} .

- In Stage 1, make the intervals wider until the person doing the test gets every single one right. Then gradually make them closer and closer until they literally could not be any closer together without being exactly the same. In other words, the difference between the two notes should be much, much less than the width of a very narrow vibrato.
- In Stage 2 keep the length of time between the notes short enough to be manageable, as well as keeping the two notes far enough apart, until each one is identified correctly. Then gradually lengthen the delay and pitch the notes closer together until the notes are almost identical and there is a long space between them.
- In Stage 3 you can adjust how many distracter notes there are, how discordant or distracting they are (e.g. playing notes an out-of-tune octave above the two principal notes can be very off-putting), as well as pitching the principal notes far enough apart that they can score 100%.

Applying the same process to pieces

After doing the tests, people often play much more in tune because they immediately start to listen in a different way. The opening of the Bruch concerto, where every G, D and B_{\flat} should be identical, provides a perfect example of how the ear tests apply to the general repertoire. It is hardly surprising that they are very effective at improving intonation.



One fascinating point about these tests is that if you give them to a wide range of players of different standards, whether professional or amateur, music student or complete beginner, you will find that there are very few people who CANNOT score 100% on notes the tiniest distance apart – or if they do not immediately, it takes only a couple of sessions before they do begin to get every one right, so powerful are the tests at focusing the attention and sensitizing the ear to the slightest variations in pitch.