Teaching jazz harmony

KS5

David Guinane

Introduction

In the first term of an A level course, we spend some time performing, composing and analysing a range of jazz standards. The teaching of 'jazz harmony' (and what that term means) is a much debated topic. In this resource, I'll be exploring a range of jazz standards to give students an understanding of common chord progressions, as well as harmonic direction, structure and devices that will aid their musical understanding. I hope there are elements of this approach that can be integrated into your own KS5 curriculum.

Nuts and bolts

Intended outcomes

Above all, students should understand that chords aren't just isolated sounds, or groups of notes, but that they often have a relationship with the chords that both precede and follow them. Students should be encouraged to move from a 'vertical approach', where they take each chord and look at it individually, to a 'horizontal approach', where they study a progression as a whole. With this knowledge, they can look back into the Western classical tradition, forward into contemporary styles, and in all directions to music from non-Western traditions. They can use their understandings in their analyses, their performances, and of course their own compositions.

Prerequisites

As a general rule, through their studies lower down the school, A level students should already understand the 'harmonisation of the major scale' – in other words, that each scale degree has an 'associated' chord, either major, minor or diminished, formed by the pattern 'play a note, miss a note, play a note, miss a note, play a note'. They should understand language like 'chord I' and 'chord V', and they should hopefully recognise a table such as this one:

C major scale, harmonised (3-note chords)

I	ii	iii	IV	V	vi	vii
C	D	E	F	G	A	B
Cmaj	Dmin	Emin	Fmaj	Gmaj	Amin	Bdim
CEG	DFA	EGB	FAC	GBD	ACE	BDF

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Frank Sinatra recording at the Capitol Studios, Hollywood, in 1955

The material in this resources is drawn primarily from the 'Great American Songbook' and related jazz standards.

They should already have experience of creating chord progressions using these chords, and also have some idea of the importance of the relationship between chords I and V. With a bit of luck, they will also be able to transfer these understandings to different keys.

Terminology

There's a lot of terminology used throughout this resource, so it's a good idea to collect the terms together here: decide the best way of introducting them to your students:

- Changes
- Lead sheet
- Jazz standard
- Head/head arrangement
- Chord substitution
- Comping
- 32-bar popular song

It's definitely worth going over all of this again before diving into jazz chords.

Lesson structure and justification

This area can be particularly enjoyable because you'll spend most of it playing music together with your students. Most lessons are focused around a particular jazz standard (but really, a harmonic concept): as students walk in, have a version of that standard playing. You can then hand out the lead sheets, and perform the head as a class. Some improvisation can happen, and you can record a performance. You can then sit down and analyse the chords through annotation and discussion. Students then have time to consolidate that understanding, whether through independent time playing through the chords and hearing the harmony, listening to a variety of interpretations of the standard, or composing short ideas based on the harmonic concept covered.

In my own teaching, students often want to know the next standard will be, and even make suggestions themselves. We call these lessons 'jazz club', which helps engage students.

Here's a rough outline of the process.

Step 1: four-note chords and the ii-V-I

With the 'harmonised' major scale (see above) as your starting point, move from three- to four-note chords by continuing the 'play, miss, play' formula. This will leave you with a harmonised major scale that looks like this:

C major scale, harmonised (4-note chords)

I	ii	iii	IV	V	vi	vii
C	D	E	F	G	A	B
Cmaj7	Dmin7	Emin7	Fmaj7	G7	Amin7	Bm7b5
CEGB	DFAC	EGBD	FACE	GBDF	ACEG	BDFA

Chord symbols and alternate names
A note on chord symbols and naming: different lead sheets will refer to different chords in different ways. As a basic guide:

- Cmajor7 can be written as CM7, Cmaj7, or C△7.
- Cminor7 can be written as Cm7, Cmin7 or C-7.
- The 'minor 7 flat 5' (Cm7b5) chord is sometimes written as a 'half-diminished chord' (Cø7).

It's worth giving students time to play through these chords, to note the different qualities and characters of the major 7th, minor 7th and dominant 7th.

The next step is to extract the three most important chords: ii, V and I. In C major, those are:

Dm7	G7	Cmaj7

If you have time, it's worth playing through this progression in a number of keys, to really get the sound of it into students' heads.

Depending on students' knowledge of Western classical harmony, it might be helpful to describe ii-V-I as the 'jazz version' of IV-V-I.

Minor keys
It's important to repeat the same process with minor chords, but this can also confuse students. Depending on whether we deal with the harmonic, melodic or natural minor scales, three separate sets of chords could be created using the 'play, miss, play...' formula. To make matters worse, there's no real consensus in jazz, and a number of different harmonised minor scales are used. In my experience, the chart below is the most common, but with multiple exceptions in real-world usage.

C minor scale, harmonised (4-note chords)

I	ii(b5)	III	iv	V	vi(b5)	VII
C	D	Eb	F	G	A	Bb
Cmin7	Dmin7(b5)	Ebmaj7	Fmin7	G7	Amin7(b5)	Bb7
C Eb G Bb	D F Ab C	Eb G Bb D	F Ab C Eb	G B D F	A C Eb G	Bb D F Ab

As you can see, there's little consistency as to which notes come from which minor scale. And again, many jazz musicians will stray from even this formula. The most important concept, however, is to extract the ii-V-I from a minor key:

Dm7(b5)	G7	Cmin7

It is also fairly common to make chord V a V7(b9) chord, which sounds really cool.

By this point, students should understand how to 'work out' a ii-V-I progression, and play it.

Step 2: the first standard – 'Fly Me to the Moon'

'Fly Me to the Moon' is an obvious choice, but it makes total sense. Before showing students the lead sheet, ask them to work out the ii-V-I progressions in C major and A minor:

Dm7	G7	Cmaj7

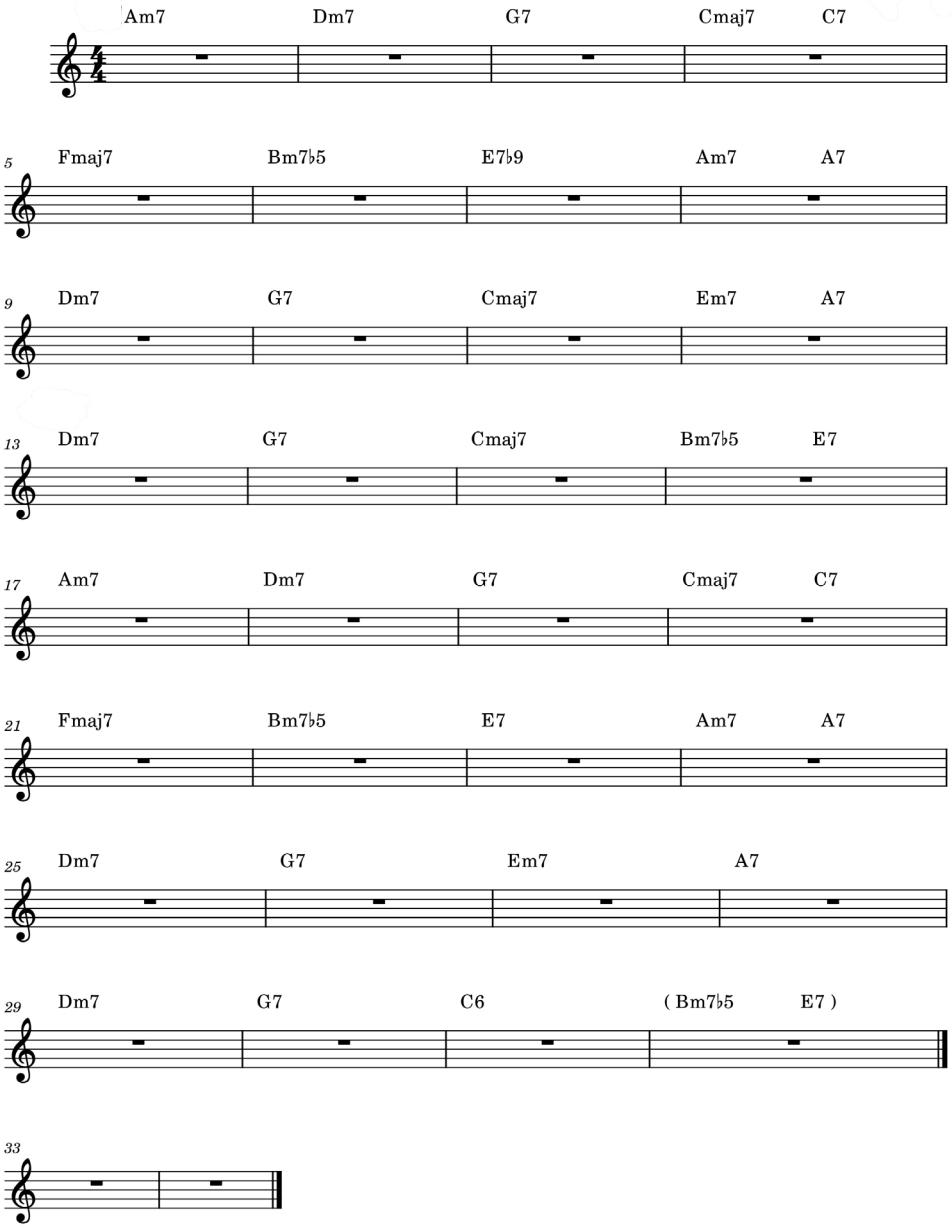
Bm7(b5)	E7	Amin7

Listen to the Count Basie/Frank Sinatra version of the track (**www.youtube.com/watch?v=fa4UguKRgNg**). Now, play through the chords and melody of 'Fly Me to the Moon' as a class. If required, provide the melody in tab, the chord shapes for guitarists, lyrics, transposed versions, or a written-out walking bassline. Use backing tracks if you need to. It's important to make the music as accessible as possible for the musicians in front of you. Much of this is available online.

Next, give students the lead sheet or chord progression. Make sure everyone has the same one. The example below should serve as a useful guide for the chords to 'Fly Me to the Moon'. Ask students to identify ii-V-I progressions in either C major or A minor.

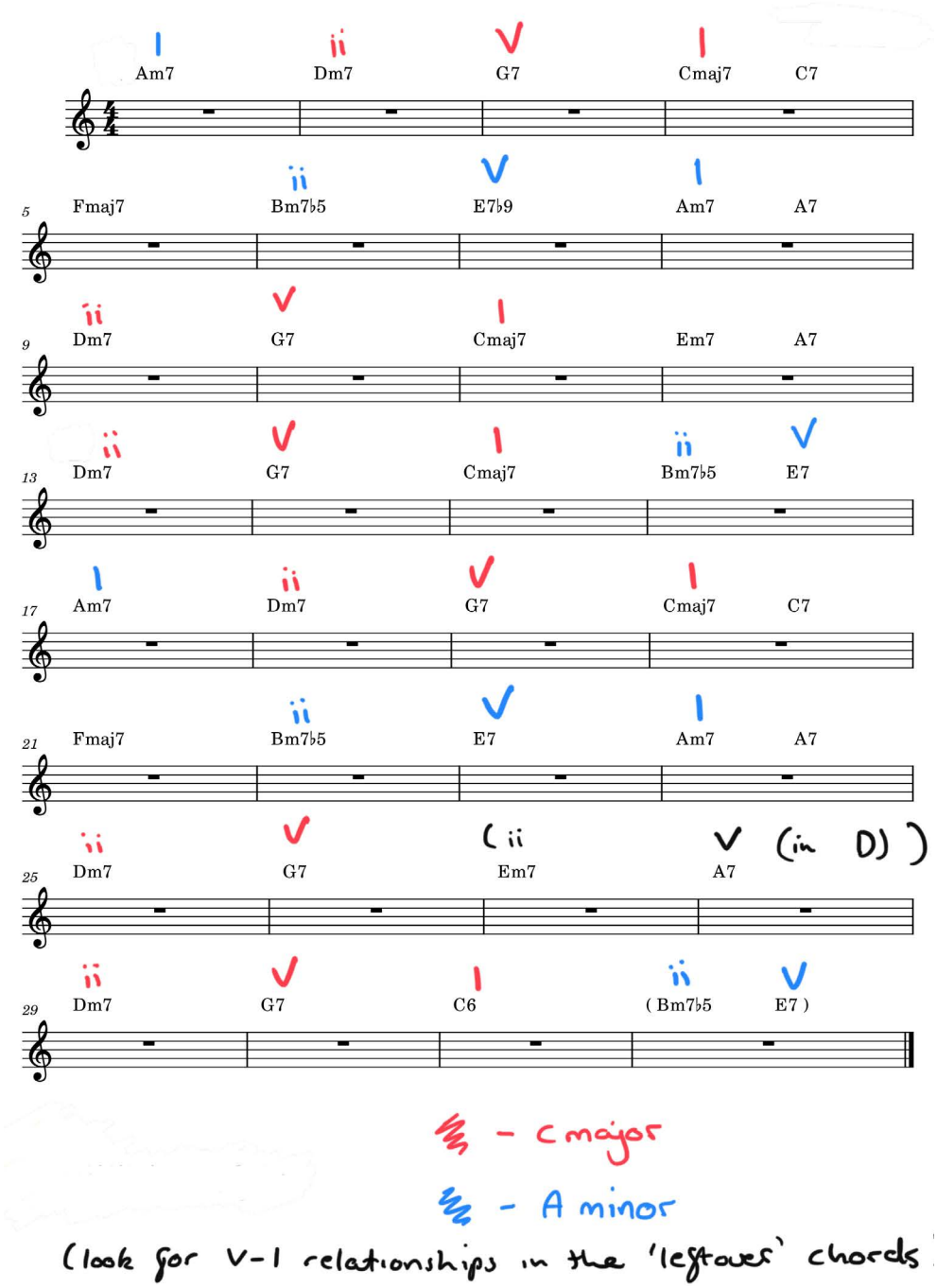
For copyright reasons, I've provided the chord progressions for two standards in this resource, but not the melody. Please see the final section for information about acquiring lead sheets.

‘Fly Me to the Moon’: chords



Through annotating the lead sheet, students should end up with something that looks like this:

‘Fly Me to the Moon’: annotated chords



At this point, students should notice that this jazz standard is (almost) exclusively comprised of ii-V-Is in either C major or A minor (two closely related keys). Hopefully, this analysis starts to simplify the complexity of jazz harmony – it's often comprised of variations around just one chord progression (ii-V-I).

Step 3: taking it further – 'Autumn Leaves'

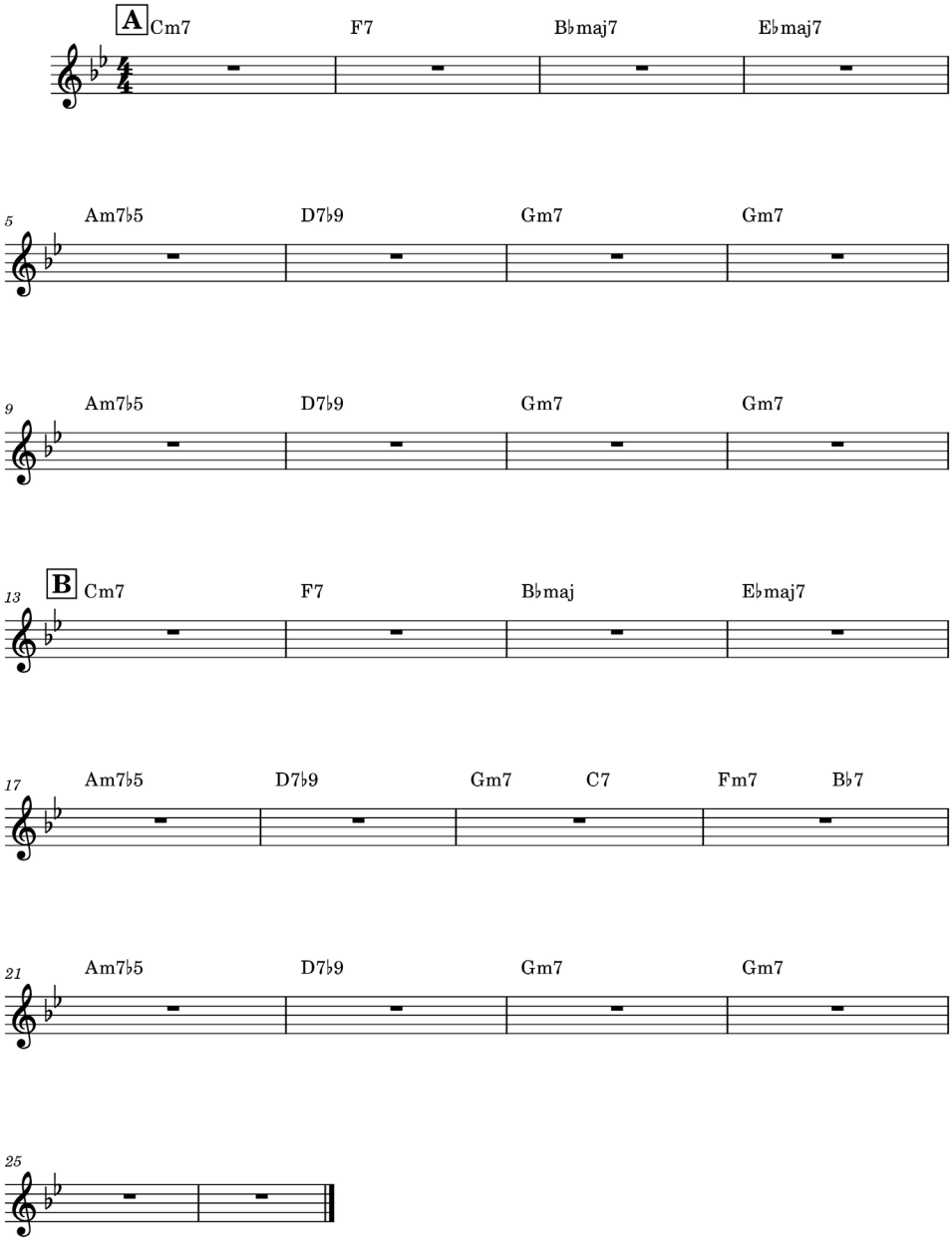
The next step is to look at the standard 'Autumn Leaves'. The Sinatra (**www.youtube.com/watch?v=Q9vZ3hHyJL8**) or Cannonball Adderley (**www.youtube.com/watch?v=u37RF5xKNq8**) versions are my suggestions for entry music here. As preparation, students could work out the ii-V-I progressions in B flat major and G minor, as shown here:

Cm7	F7	Bbmaj7

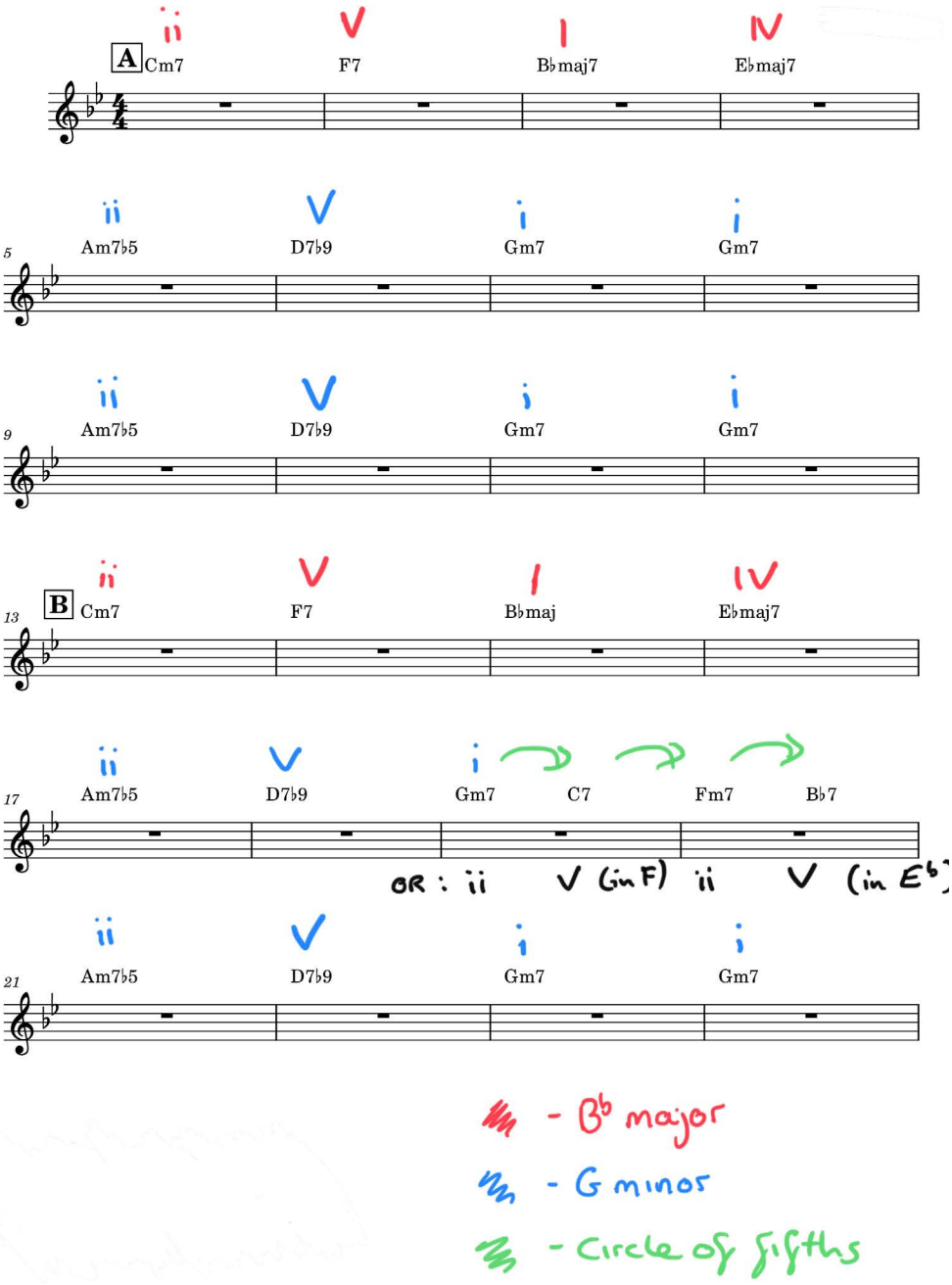
Am7(b5)	D7	Gmin7

Again, play, sing, and then sit down to analyse, using the chords below if you find them helpful. You'll find several ii-V-Is in B flat major and its relative minor, G minor. However, we also have a few extra chords, and some more interesting harmonic movement towards the end, highlighted in green on the annotated 'Autumn Leaves' lead sheet, which immediately follows it.

‘Autumn Leaves’: chords



‘Autumn Leaves’: annotated chords



At this point, we can discuss the relationship between the ii-V-I and the cycle of 5ths. Students may make the connection that the roots of the chords in a ii-V-I (D, G and C, for instance) move around the cycle of 5ths, as do the chords towards the end of 'Autumn Leaves'. Students can begin to make the connection between the cycle of 5ths and the concept of harmonic direction – the sense that chords are leading to another chord, based on these musical conventions. Like a map, if you need to get somewhere (a certain chord), you can plan a route through the cycle of 5ths. Alternatively, you can choose not to follow this established pathway, which will have a different effect on the harmonic direction of a piece. We'll see more about this in the next step.

Modulating?
At this point, students might ask if we're modulating. They might well mean 'officially changing key'. I encourage students to think less definitively about keys and modulation. This harmony allows us to 'pass through', 'hint at', or 'briefly visit' different keys or tonal centres, without necessarily 'arriving' at a key in the style of Western classical harmony. In terms of language, I encourage students to say 'this is a ii-V-I in D major' rather than 'we have modulated to D major here'.

Step 4: 32-bar popular song form – 'I Got Rhythm'

'I Got Rhythm' is another classic jazz standard, as well as a useful teaching tool. It's structured around four eight-bar sections, in an AABA form. This totals 32 bars, and this structure forms the blueprint for countless jazz standards. It's always worth getting students to compose a 32-bar lead sheet at some point: here's a 'broad brushstrokes' guide. Straying from these rules is, of course, the fun part.

We can do more with 'Autumn Leaves' once we've established the concept of chord substitutions, so we'll return to this standard later.

12-bar blues form – annotated progressions

The basic, 'KS3', 12 bar blues…

I C7	I C7	I C7	I C7
IV F7	IV F7	I C7	I C7
V G7	IV F7	I C7	I (G7)

12 bar blues, with a single ii V I progression…

I C7	IV F7 (optional)	I C7	I C7
IV F7	IV F7	I C7	I C7
ii Dm7	V G7	I C7	(V) (G7)

When looking at 'I Got Rhythm', students should pick out the I-vi-ii-V-I progression in the first line, but they may have difficulty analysing the second half of the A section. The most valuable learning, however, lies in the middle eight. In its simplest form, it looks like this:

D7	D7	G7	G7
C7	C7	F7	F7

... to B flat major...

This is about as clear a journey through the cycle of 5ths as it's possible to encounter. Encourage students to look at a 'target chord': in this case, we need to get back to B flat for the return of the A section. If we work backwards through the cycle, our route is planned out for us. That's why we start on a D7 chord at the start of the B section. The constant tension in the string of dominant 7th chords is also interesting: we want to resolve onto a tonic, and though the next chord has the 'correct' bass note for a V-I resolution, we encounter another dominant 7th chord, so the tension continues.

We can develop these chords by complicating the B section. We often see this in 'I Got Rhythm':

Am7	D7	Dm7	G7
Gm7	C7	Cm7	F7

Here we see the same movement around the cycle of 5ths, but accompanied by 'incomplete' ii-V progressions. Instead of resolving to chord I, we start another ii-V, with a perpetual sense of harmonic direction that only resolves when we get to the B flat chord upon the return of the A section.

At this point, we've touched on chord substitution – deviating from the 'established' chord progression for a particular harmonic effect. If your students are still with you, we can take this concept much further.

For many of my own students, this is the first time the cycle of 5ths has been put into context, and described as a tool for understanding and manipulating harmony, rather than simply a dry image to memorise.

Step 5: chord substitution and the tritone

I really enjoy projecting this sentence for my students, and watching their faces contort into a range of confused (and desperate) shapes:

A tritone substitution is when you replace the V7 chord in a ii-V-I progression with another dominant 7th chord a tritone away.

Of course, we then precede to break this concept up logically.

The ii-V-I is so ubiquitous in jazz that we sometimes want to vary the progression slightly, to give us a greater range of harmonic tools when composing or performing.

If we take a ii-V-I in C major –

Dm7	G7	Cmaj7

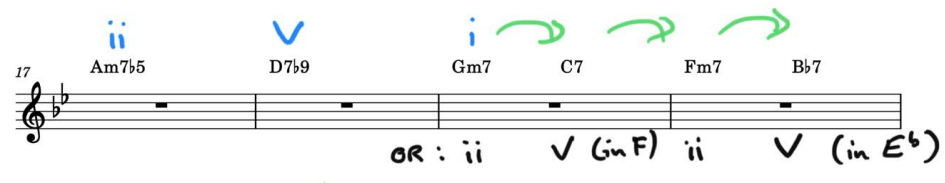
– and follow the instructions in the sentence above, we need to replace it with a dominant 7th chord a tritone away. A D flat is a tritone away from a G, so we replace the G7 chord with a Db7 chord –

Dm7	Db7	Cmaj7

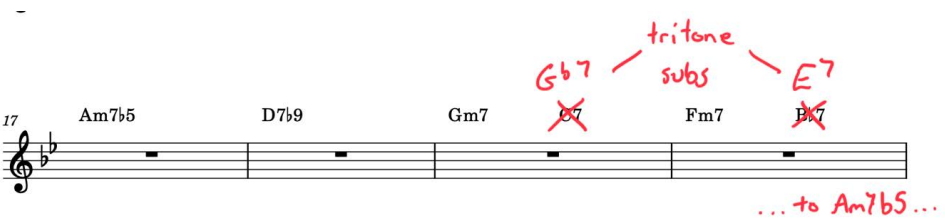
You can then play the two progressions, and discuss them.

The 'tritone' sub version gives us a bassline that goes D-Db-C, which descends chromatically, as an alternative to the original ii-V-I bass movement. It works because the two chords (G7 and Db7) share two important notes: the F, which in the original chord is the minor 7th, giving us that juicy desire to resolve to the C chord, and the B, which is the major 3rd in G, a key note to tell us the 'quality' of the chord. Think of it as a like-for-like substitution in football: the incoming player essentially fulfils the same role as the player they're replacing, but brings something slightly different to the table.

We can now go back through our lead sheets and study the effect of a tritone substitution in a couple of key places. My favourite is a progression from 'Autumn Leaves' (the annotation is taken from the annotated example used above):



The simplest version of these chords move around a cycle of 5ths, and we have two V chords. If we replace these V7 chords with dominant 7th chords a tritone away (a tritone substitution), we get this:



We now have some very pleasing harmonic movement, with a baseline descending chromatically. In addition, the E7 chord now leads really nicely into the Am7b5 on the next line, as a V-I.

The Am7b5 chord can now be described in two ways. It is simultaneously chord i in A minor (following the E7 that precedes it), as well as chord ii in B flat major (as part of a ii-V-I). Discussion of the multiple roles of chords in jazz charts is a really important part of students' understanding of jazz harmony.

The whole 'devil's interval' aspect of the tritone isn't really relevant here, and can complicate matters – it's probably better to disregard it.

Step 6: next steps

Through the standards discussed, students can start to apply their knowledge to a range of lead sheets in the jazz idiom. Playing a standard and discussing its chord progression is an almost weekly occurrence in my own lessons, and over time students develop a more complex understanding of what's happening harmonically. You can find ii-V-Is in so many standards, so feel free to be led by students. However, there are a couple of standards that are particularly worthwhile looking at:

- 'Caravan' (Duke Ellington/Juan Tizol) (**www.youtube.com/watch?v=r95flkZciJE**): the A section of this chart has an extended V chord (with a common substitution) that takes a long time to resolve.
- 'Take the "A" Train' (Billy Strayhorn) (**www.youtube.com/watch?v=YKDSfx5d2pc**): chord II7 in the first line of this piece is a great examples of a 'borrowed chord', from a different key entirely, that has a really interesting harmonic effect.

In addition, it's important to compare different versions of each standard. This can really improve students' ability to describe and analyse recordings, and comment on their effect.

Of course, composition is also crucial. This harmonic language can form the basis of a number of composition tasks: add a melody to a chord sequence, harmonise a melody using ii-V-Is, or compose an entire 32-bar popular song form 'jazz standard'. Workshopping composed chords and melody, in the same way you play through the 'real' standards, can be a really illuminating experience for young composers.

The blues

Jazz and blues are intrinsically linked, and any study of jazz harmony has to encompass the blues. The scope of possibilities here could form another resource in itself, but I will touch on my approach here. Most students have an understanding of the basic, three-chord, 12-bar blues from KS3, but it's quite straightforward to show how more complex jazz harmony has found its way into the blues form. An example of a worksheet I use can be found earlier in this resource. Handing out 'real books', asking students to find 12-bar blues standards, and then analyse the progressions, is a fun activity to complement this learning.

Finding lead sheets

There are a number of sources online for lead sheets (the chords and melody of a jazz standard). The 'real books' are a good source, but you will find discrepancies between editions, and some flat-out errors in each book. Some versions have lyrics, and some are way easier to read than others. Individual lead sheets are usually available to download from popular music retailers online (and usually in a few different keys). The ABRSM real books that accompany their jazz grades are interesting: they contain lesser-known tunes, but buying a set in all keys (C, B flat, E flat, bass) ensures consistency, and they are usually laid out clearly on a single sheet of A4. A number of YouTube backing tracks for standards often display the chords, and sometimes the melody, alongside the video.

Closing thoughts

'Jazz' harmony is probably a bad title for this resource – we're really just expanding the harmonic knowledge and vocabulary of our students, and these lead sheets are a useful approach to this goal. Many jazz educators would argue that the ii-V-I concept can stifle truly expressive improvisation, but that isn't the goal here – we're teaching for harmonic understanding, and understanding that can be transferred elsewhere. The approach doesn't work unless you regularly play these charts as a class, in any way you can, in order to consolidate understanding. Encouraging students to think of chords as numbers (ii to V instead of Dm7 to G7), and to consider a chord's relationship to those before and after it, has benefits across their musical lives. Good luck with your new A level 'jazz club'!