

Jane Werry is a Specialist Leader in Education, and Director of Music at Hayes School in Bromley. She is a Musical Futures Champion Teacher, and co-author of the award-winning *Being a Head of Music: A Survival Guide*.

by Jane Werry

INTRODUCTION: WHY TEACH VARIATIONS AT KS3?

The short answer is that it gives a lot of bang for your buck: you can explore many musical concepts through a unit on variations in a relatively short space of time. These include meaty compositional techniques that can feed into all sorts of projects later on in KS3 and at GCSE. Ultimately, learning how variations work provides an understanding of different ways in which a musical idea can be developed, which has been a preoccupation of composers in all styles since the Renaissance.

Here's a rundown of the ideas covered by this resource:

- Playing 'Frère Jacques' by ear, including exploration of melodic shape and structure.
- Melodic variation: adding notes, inversion, sequence, retrograde.
- Harmonic variation: adding chords, major and minor.
- Rhythmic variation: changing rhythms and metre.
- Textural variation: parallel motion, contrary motion, counter melody, round, call and response.

Along the way, some existing variations on 'Frère Jacques' are explored, including jazz versions and the funeral march from the third movement of Mahler's First Symphony.

If you choose 'Twinkle, Twinkle, Little Star' or 'God Save the Queen', there are, of course, excellent examples to use for inspiration in Mozart's Variations on 'Ah, vous dirai-je, Maman' and Charles Ives' *Variations on America*.

WHY 'FRÈRE JACQUES'? COULD ANOTHER THEME BE USED?

It would, of course, be perfectly feasible to use a different melody as the starting point for a project on variations. However, there are reasons why the musical characteristics of 'Frère Jacques' make it particularly suitable:

- Small range.
- Predominantly conjunct motion.
- Brevity.
- Simple structure with repetition.

Other melodies that fulfil the same requirements, and which could also be used for this project, include 'Mary Had a Little Lamb', 'Happy Birthday to You', 'Twinkle, Twinkle, Little Star', 'Row, Row, Row Your Boat', 'God Save the Queen', and 'Oh When the Saints'.

You might be tempted to pick something pentatonic. However, moving a given melody between major and minor is much trickier when it's pentatonic. Because this is one of the main points for harmonic exploration in this project, a melody that is thoroughly diatonic is a much better starting point.

GETTING STARTED

The first thing that students need to know is how to play the theme. However, since we're using a simple melody as our theme, it would be a missed opportunity not to make this into a playing-by-ear exercise. In which case, the first thing students need to know is how the melody goes, as they need to have it in their heads before they can work on getting it out of their heads and onto an instrument.

French

Frère Jacques, dormez-vous?
Sonnez les matines, ding dang dong!

English

Brother Jack, are you sleeping?
Ring the morning bells, ding dong!

Put the words on the board, in case students have mislearnt them previously (perhaps from having misheard them) and provide a translation so that they're clear what the song is about. The song exists in many different languages – it would be interesting to find out if any of your students have learnt it in anything other than French or English.

Teach the song using call-and-response if necessary, and get it going as a round, first in two parts and then in three. Point out the repeated phrases, and ask students to identify which phrases contain the highest and lowest notes. Asking students to draw the melody in the air with a finger can help with this. Sing up and down the notes of a scale using numbers 1 to 8. 'Frère Jacques' starts on 1 – ask students to identify what number the second phrase starts on.

Students can now be given the task of working out how to play 'Frère Jacques' by ear on an instrument. Keyboards and xylophones work really well for this, although if students have their own melodic instruments to use, then any combination of woodwind, brass or strings could be thrown into the mix. If you've been careful not to give away already that you're working in the key of C major, their first job could be to find the starting note, having sung it first (and having it repeatedly heard while they are 'finding' it on their instruments).

There will always be students who are able to pick out the melody straight away. Others will take a little while, working by trial and error, to figure it out. For those that get it immediately, you could give them worthwhile extension work by asking them to start on a different note (for example F sharp), or to work out an accompaniment using tonic and dominant notes or chords. If they are already experienced keyboard players, they could be tasked with playing it as a round by themselves, with one hand following the other.

At some point in the process, the note on 'dang' in the final phrase will cause problems to those who started on the lowest note of instruments that only go down to a C. Make this a point for discussion, pointing out that the first note is not the lowest note in the range of 'Frère Jacques'. You could also discuss which number to assign to the 'dang' note, if the first note of the melody is 1. How do we count down to the 'dang' note? What note is the note below 1? This brings up a crucial point about 1 and 8 being equivalent – which is something that might seem too obvious to mention, but is well worth addressing explicitly, so that students build solid mental constructs about octave equivalence and how pitch works in music.

Workshopping the first few variation ideas

So far, students have been working individually on their instruments. Later in the project, they will be working in small groups. For now, though, it's a good idea to get some of the main variation ideas going through whole-class workshopping.

Having sung 'Frère Jacques' as a round, and subsequently having worked out how to play it, it should be easy enough to divide the class up into groups and play it as a round. You could even have each student starting individually at two-bar intervals, and repeating the melody until the whole class has joined in.

Some students very much enjoy using xylophones for this project, as it makes the patterns in the music very easy to see. There are also times when taking off certain notes might be handy.

An even simpler way to divide up the melody is to create an antiphonal call-and-response texture, with one side of the room doing the first play of each line as the call, and the other side doing the repeat as the response. You could play around endlessly with dynamics and octaves on this, creating echo effects, using student conductors to indicate dynamics, or even combining the antiphony with a round, so that there are two separate sets of call-and-response happening in canon.

Then ask students to start playing on a different note – effectively moving the 1 to a different pitch. Begin by getting them to move everything two notes down, and start on A (using only the white notes). This is, of course, moving it from C major to A minor.

Ask the class what the effect is on the mood of the piece. Experiment with the round and the antiphonal texture in the new minor key. Try it with half the class starting on C and half in A – and *voilà*, you have parallel motion. Students who are up for a challenge can play both notes at once (if they are on a keyboard or xylophone). Now would be a good moment to get students to experiment individually with starting on each different pitch, and seeing what effect this has on the melody. Combine the different starting-notes in different combinations to experiment with intervals. Which ones ‘fit’, and which ones result in a clashy sound?

DEALING WITH THE SHEER QUANTITY OF MUSICAL TERMS AND CONCEPTS

We have already covered a fair few musical ideas in a short space of time:

- round/canon
- call and response/antiphony
- major and minor
- parallel motion
- intervals
- consonant and dissonant

Is it necessary to give all of these things their names? Is it enough just to be able to play them? This is a topic for debate, and you’ll need to decide what your own stance on it is. My position is that it’s good to know how to describe things accurately using the correct terms – but that I always want my students to encounter something through practical music-making *before* they learn what it is called: this is John Paynter’s principle of ‘sound before symbol’.

Learning the correct terminology is also a good preparation for the knowledge required for GCSE music – not that this is the sole purpose of KS3 music, by any means. Being able to use correct terminology also makes students feel accomplished, and that’s always a good thing.

The concept of intervals is one that needs its own explanation on top of experimenting with ‘Frère Jacques’ in parallel motion. You can do this really well if you have individual chime bars, or perhaps Boomwhackers. Get eight student volunteers to take a note each, and arrange them in pitch order – if you’re feeling bold, you could have the student with the lowest note lying on the floor, and the one with the highest note standing on a table, with all the others between.

Explain that when counting intervals, you have to remember to count your starting note as 1, and go from there, but that it doesn’t matter whether you’re going up or down. Practise calculating the intervals from note to note. Listen to each interval as a chord, and identify which ones are consonant and dissonant. Students will probably need reminding that intervals are called 6ths and 3rds, not sixes and threes. Revisit this concept briefly each lesson to ensure that students revisit and recall the information.

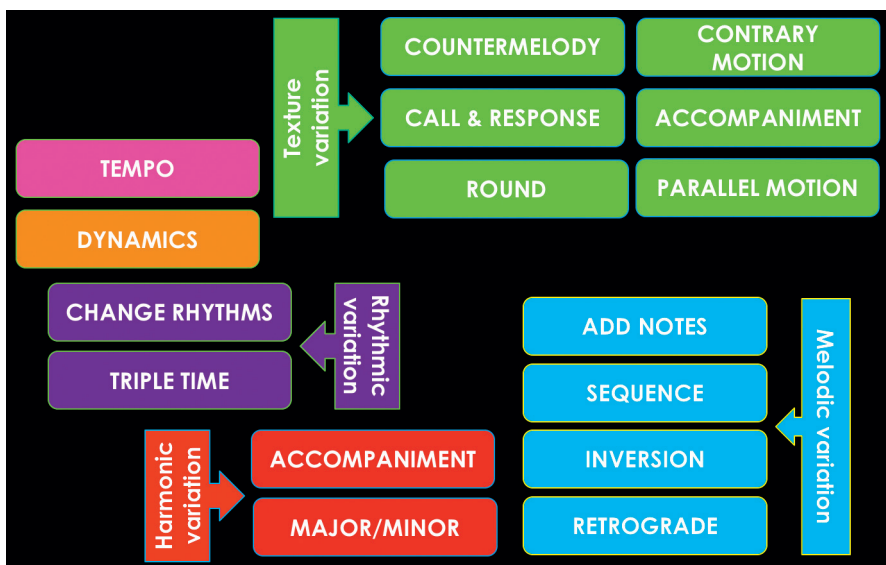
As we explore various techniques and ideas for creating variations, we are introducing a long list of musical terminology. How can you deal with all of these terms so that students actually learn them? The key here is retrieval practice. This is going to take some work, because it’s likely that you only see your KS3 classes once each week. You are going to need to utilise homework opportunities as well. Here are some ideas:

- Whenever a new term is introduced, reinforce it and its definition using choral speech. Ask ‘What is an interval?’ and get your class to say ‘The distance between two notes.’ Then ask ‘What is the distance between two notes?’, with them replying ‘An interval.’
- Set micro-tasks for students as a starter or plenary. These can be super-simple and very quick, such as ‘show me the interval of a 7th’ or ‘make a ten-second piece that demonstrates parallel motion’.
- Set new words each week as a learning homework, with quizzes at the start of the next lesson.

- Make all quizzes and learning homework cumulative: each one includes all previously learnt terms, and adds the new ones.
- Use online quizzes created using Show My Homework, Kahoot, Quizlet, Memrise, Plickers or whatever suits your school system and classroom set-up.
- Give students a knowledge organiser at the start of the topic, with *all* of the terms for the whole project on it. Teach students how to use self-quizzing to learn the terms (you could direct them to this video for help) and have a quick test each lesson.
- If you use folders or books in your lessons, you can of course get students to fill in a glossary like the one shown below.

Term	Definition
Theme	The melody everything is based on
Variations	Changing the theme to make it sound different
Ostinato	A repeating rhythm or melody
Tonic & dominant	The 1 st and 5 th notes (or chords) of the key you are in
Parallel motion	Two notes at a time: always the same distance apart
Sequence	Repeating a little tune up or down one note each time
Contrary motion	Moving in opposite directions
Inversion	Play the tune upside down
Retrograde	Play the tune backwards
Countermelody	An extra tune on top

Make sure that the terminology is revisited every lesson – preferably frequently every lesson, and in different ways. It can also be very helpful to group the terms depending on which element of music they relate to. This also helps students put their knowledge into a mental scheme that promotes deeper understanding. Here is a representation of all the terms covered in this project, grouped by element:



This is a screenshot from a PowerPoint that can be found together with the online resource.

RECREATING MAHLER'S VERSION OF 'FRÈRE JACQUES'

Depending on students' experience of orchestral music, they may have many questions about the instruments that they've seen and heard, and the role of the conductor: take time to answer these fully.

Mahler's own variation of 'Frère Jacques' is easily accessible and is an excellent example of how a variation on the tune might work. It's also a piece of classical music that is likely to be unfamiliar to students, yet quite easy to understand.

Show students a video of the beginning of the third movement of Mahler's Symphony No. 1: this one from the Los Angeles Philharmonic is good, as it gives excellent close-ups of the instruments. From their prior knowledge, students should be able to identify that 'Frère Jacques' is being played in a minor key, and in a round. They may also be able to identify that there is a repeating accompaniment pattern made from two pitches, that some extra notes have been added to the melody, and that an extra tune has been added over the top.

Recreate this with the class. Mahler writes in D minor, so xylophones will need B flat keys, and the melody starts on D. B flat is the only black note. Ask students to work out the pitches of the two-note ostinato (D and A); an extension could be to work out the notes of the oboe countermelody (it starts with D, F and A). Where does Mahler add his extra notes to the melody? If you have a range of instruments, perhaps start the round with the lowest ones, to emulate the way that Mahler starts with the double bass, bassoon and tuba.

As you do this, introduce the terms ostinato, countermelody and ornament. You could also introduce tonic and dominant with regards to the notes of the ostinato, although you may decide that 1 and 5 will do.

GETTING STARTED WITH SMALL-GROUP WORK

Get students into groups of three or four. Before you set them free with putting their own variations together, introduce some more variation techniques by setting some short group challenges. Sometimes it helps to represent ideas graphically as well as using words, to reinforce meaning using [dual coding](#).

The first challenge could be to revisit parallel motion, and then build on this by adding contrary motion:

TEXTURE variation PLAYING FRÈRE JACQUES IN PARALLEL MOTION

- Play *Frère Jacques* in double layers
- Experiment with different intervals
- Which ones do you like/dislike?

TEXTURE variation CONTRARY MOTION

- **Contrary motion** is the opposite of parallel motion
- Can you make a mirror-image version of *Frère Jacques*?

This is where using a xylophone works particularly well for some students, as the patterns are particularly clear visually and spatially. Students playing single-note melodic instruments actually need to think a little bit harder, as the patterns are less visual, but this can be a great challenge for your more experienced instrumentalists (particularly if they play a transposing instrument and need to fit in with others).

Both of these challenges work equally well with students playing both parts of the parallel/contrary motion, or just one, in ensemble with the others in their group. The parallel motion idea can be built up in more than two layers, of course. Students could try having each group member starting on a different note, experimenting with triadic (ie starting on C, E and G) or quartal (starting on C, F and B) versions.

RHYTHMIC variation

METRE CHANGE

- Make a triple-time tonic-dominant accompaniment that goes C-G-G
- Can you then adapt *Frère Jacques* to fit over the top?

We have not yet experimented with rhythmic variations. Perhaps the most drastic of these is to change the metre. 'Frère Jacques' translates well to triple time, but many students find this a little tricky. It can help to put in an accompaniment first. You can take the tonic-dominant ostinato idea from Mahler and adapt it into an oom-cha-cha pattern, using the notes 1-5-5 or perhaps with the notes of chord I in your chosen key (remember you might be using any note as your 1 to make 'Frère Jacques' minor or modal):



Once this is established, it makes it easier to adapt the note-lengths of the melody to fit with triple time. Hopefully it will come out something like this:



We need to establish one more idea for melodic variation before we can set groups free – the idea of taking a small chunk of the melody and making it into a sequence:

MELODIC variation

PLAYING FRÈRE JACQUES IN A SEQUENCE

- Take one bar of *Frère Jacques*, either in C major or D minor
- Repeat it, moving it up or down one note each time

- Can you play it in parallel motion **and** in a sequence, at the same time?

Any of the phrases from 'Frère Jacques' will work well as a sequence. Here, the third phrase, 'sonnez les matines', is used.

Another good challenge – but one that's trickier than it initially appears – is to try playing 'Frère Jacques' in retrograde, in other words backwards, starting with the last note and ending with the first.

Keep drip-feeding exemplar listening into lessons, perhaps as starter or 'do now' activities. Here are some ideas for good pieces to listen to, with students being asked to identify what's happening to the theme:

- This jazz flute version of 'Frère Jacques' features altered rhythms to give a syncopated jazz feel, countermelody, drumkit accompaniment, and a 'plus one' key change.
- Ray Barretto's jazz version has harmonisation using jazz chords, mostly in parallel motion. There is also a *son clave* rhythm plus a drumkit rhythm. The melody is treated with syncopated rhythms. Later on, it goes into free saxophone then trumpet improvisations over the top of parallel piano chords that echo phrases of 'Frère Jacques'.
- John Iveson's variations on 'Frère Jacques' for brass quintet are brief, eventful and accessible. If you have an old copy of the 1990s Heinemann classroom resource *Music Matters*, the listening exercise based on these variations is still very much worth doing.
- Charles Ives's *Variations on America* is a set of seven variations on the melody known to us as 'God Save the Queen', but in the USA as a patriotic hymn entitled 'My Country, 'Tis of Thee'. This was commonly used as America's national anthem before the adoption of 'The Star-Spangled Banner' in 1931. Because the piece lasts eight minutes, you need to either pick individual variations for listening, or listen to it all and make the activity a bit more structured. If you decide to go for listening to the whole set, you could jumble up all of the features found in the variations, and ask students to assign each feature to the correct variation. Here is a rundown of what happens when:
 - Fanfare-like introduction, followed by the theme at 1:21 played by muted brass.
 - 1:55 variation 1: woodwind countermelody over theme on legato strings.
 - 2:40 variation 2: slower, reharmonised using chromatic harmony and unexpected chords.
 - 3:24 variation 3: very dissonant, played as a round but in different keys. The melody is left unfinished.
 - 3:51 variation 4: a change of mood and metre (into 6/8). The melody is heard twice, with a countermelody the second time, humorous ending.
 - 4:47 variation 5: now in a minor key. Spanish feel with castanets and tambourine.
 - 5:49 variation 6: woodwind theme with elaborate trumpet countermelody before strings and then brass take over the theme, big build up into...
 - 6:48 variation 7: a big finale in a similar fanfare-like style to the introduction.
- Mozart's Variations on 'Ah, vous dirai-je, Maman' (commonly known as 'Twinkle, Twinkle, Little Star') can be good to have a look at. This video has the score, which can help students keep track of what's going on, even if they're not the most confident readers. Mozart works through almost every variation technique that we've encountered in the project, with typical finesse.

THE COMPOSING PHASE

Students should now have a pretty good grasp of the possibilities for using a wide range of techniques for developing a melody, and how variations on 'Frère Jacques' might sound. Their task in their groups is now to assemble ideas from the menu of techniques in ways that are imaginative and musically convincing. The thing to emphasise is not simply to do one idea at a time: they really need to be putting three or four ideas together, as modelled by Mahler and the jazz variations.

Having some models is key here. Play students some examples yourself, and ask them to identify which techniques are being used. Here are some good combinations that are simple enough to play on a keyboard or put together quickly using a sequencing program:

- Minor key in triple time, with an oom-cha-cha accompaniment and some ornaments.
- Contrary motion with altered rhythm and a sequence to extend the 'ding dang dong' phrase.
- A call and response between a high register and a low register, in parallel motion and with some ornaments on the response each time.

Pick these apart with the class to make it absolutely clear what's going on. Reinforce that each example uses three different techniques. It is, of course, possible to use more than three, but it isn't a competition, and if you try to do too many things at once the variations may sound very cluttered.

On the related PowerPoint, there are a couple of ready-made examples that demonstrate combinations of techniques.

Decide how many variations you want each group to come up with: two or three (or perhaps a minimum of two, to keep it open-ended) is a good number. As the groups work, they will need to keep track of their ideas. They could write them down, or you could give them a simple sheet to fill in with a tick-list and a space for any extra ideas. This might look something like this:

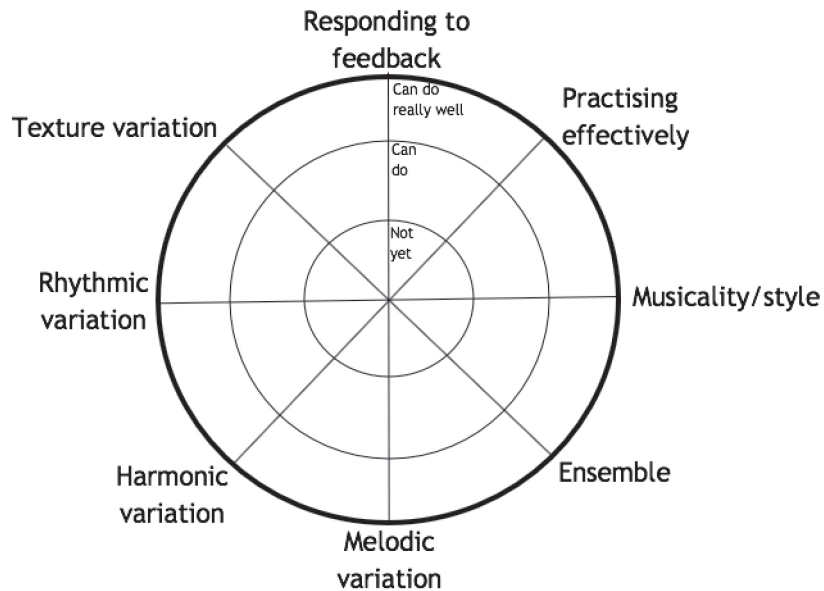
		Variation 1	Variation 2	Variation 3
Melodic variation	Add notes			
	Inversion			
	Retrograde			
	Sequence			
Texture variation	Parallel motion			
	Contrary motion			
	Round			
	Call & response			
	Counter melody			
	Accompaniment			
Rhythm variation	Triple time			
	Change rhythms			
Harmonic variation	Major/minor			
	Chords			
Other elements	Tempo			
	Dynamics			
	Other ideas			

USING ICT

This part of the project does not necessarily have to be done in groups with 'real' instruments: it would be perfectly possible for students to work individually or in pairs using any sequencing program to achieve exactly the same results. Whereas the performing and ensemble part of creating variations in a group becomes quite a focus from this point on, if doing the composing on a DAW the considerations are different. Students will need to demonstrate control over tempo tracks, metre and accurate note input if their sequenced variations are to sound effective.

In order to work out how you're going to assess students' work and give them feedback, you first of all need to decide what's important enough to assess. Much of this project is centred on being able to demonstrate a variety of different techniques for variation of a melody by combining them effectively, and then being able to communicate the ideas through performance or sequencing.

One way of keeping track of all of this is to use radar diagrams, which for this project might look like this:



The things around the outside are the areas being assessed over the course of the composing part of the project. That's not to say that all eight of these would be assessed every lesson: in order for the system to be manageable, it needs to be more fluid and responsive than that. Rather, the teacher can assess things *as they see them* as they're monitoring the groups, or when work in progress is being shown.

It's useful to include a mixture of hard musical skills (ie how well students can demonstrate techniques for harmonic variation) with some softer, more general skills (practising effectively, responding to feedback). Sometimes valuable links can be made between these. For example, it could be that a group has been judged as 'not yet' for performing with good ensemble – but this might be a direct consequence of not practising effectively. If they *have* practised effectively, but the ensemble is still not good, then there might be another good point of feedback you can give as to why (ie 'try counting yourselves in, and use a percussion instrument to keep a pulse'). If there's no movement outwards for the blobs over time, showing that the work is not improving, this might be a consequence of not responding well to the feedback. You will undoubtedly know your students well enough to know just how explicit you need to make these causal links.

'Musicianship and style' is the assessment area that might appear most nebulous. It is certainly going to require a little bit of explanation, and perhaps some modelling, if your students are to understand what they are aiming for.

Each student has their own radar diagram. It is easiest if all of the radars for a group are on the same sheet. Use a different coloured pen each time you write on the sheet, and have a space to write the date in today's colour at the top of the sheet. You can add a blob at the intersection of a ring and a spoke to show how each student is doing in that particular area. Text comments applicable to individuals or to the whole group can also be added, so that everyone is clear on exactly what they need to do to improve.

This is done little by little, and as each area is assessed as and when you witness it – it's really not an onerous task. The real advantage of doing this on paper, as opposed to any more sophisticated system using technology, is that the groups can have the sheet while they are working, so they can see exactly where they're at, and what they need to do next. Unless you have a really savvy tech system up and running, this would be

the point at which some systems (for example using the excellent rubrics in iDoceo) would be less effective. The important thing is the communication with the students about what they need to do to improve.

It's likely that you're going to end up making the same comments to multiple groups. One way you can streamline the process is to use feedback codes. Have a numbered list of common feedback points on the board (this can always be added to as more things arise), and instead of adding a text comment, simply write the feedback number on the sheet and then get students to copy it onto the sheet themselves. This way, all you're writing is the blobs and the numbers, but students are still getting detailed feedback that tells them how to improve their work. The process is also very clear for observers, in case you're required to have evidence of the feedback you've given to students.