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Subject leaders and teachers of music

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Using this guide

This guide offers some practical strategies teachers use to model learning. The techniques are tried and tested; they draw upon both academic research and the experience of practising teachers.

By working through this guide you can build your teaching repertoire step by step, starting with strategies that are easy to implement and moving on to those that will help pupils develop their understanding and skills still further. The guide helps you to reflect on specific ideas and aspects of your practice and contains practical tips and tasks to help you consider advice or try out strategies in your classroom. There is a summary of recent research and case studies to exemplify particular points. The 'Next steps' section asks you to reflect generally on the impact of this unit. There are practical suggestions for developing practice and you are invited to set targets for the future. The final section provides references to recent research and suggestions for further reading.

As you work through this unit you will:

- read about the range of modelling strategies applicable to music;
- analyse and use 'thinking aloud' strategies when modelling in a lesson (Tasks 1 and 2);
- devise supporting materials for modelling and review the use of questions during modelling activities (Tasks 3 and 4);
- prepare modelling episodes and supporting resources appropriate for different types of learners and model the effective use of a musical vocabulary (Tasks 5-7);
- use modelling techniques to support pupils' confidence in their ability to complete an identified task (Task 8);
- identify how to use specialist musicians and portfolios of work to inspire learning and define expectations (Tasks 9 and 10);
- reflect on the complete process before considering your next steps.

To assist with this process, make sure that you:

- are clear about where you are in this line of development, and why you are undertaking specific tasks – this will help to focus your time and energies on effective work;
- keep a log of the materials you create, the responses of the pupils and your own reflections on the impact of the work. There is space in this guide for you to write notes and responses to some questions, but you may find it helpful to keep a notebook handy, or to use the CPD log on the DVD.

When working through this unit, you will need access to:

Appendices	1 and 2
Resources	3a, 4a, 5e, 5f
Video	4a, 4b

Modelling in music

Contents

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Recognising impact

This unit aims to help music teachers review and refine their practice in modelling so that they can clarify more effectively the conventions, processes and procedures of the music being studied, show and articulate how pupils can improve their learning and demonstrate expectations of outcomes with greater clarity.

The unit leads teachers to use:

- 'live' musical demonstrations to model what pupils should be exploring or learning;
- 'thinking aloud' strategies that reveal to pupils the thinking behind the learning;
- recordings or ICT-based resources where these add clarity to the modelling process;
- a range of modelling strategies to articulate how pupils can improve;
- specialist musicians to inspire and place learning within a broader cultural context;
- examples of pupils' work in order to clarify the expectations of outcomes.

This enables teachers to:

- decide how the class teacher, groups of pupils or individuals can best demonstrate the essence of the music being studied;
- use careful questioning and discussion (linked to musical demonstration) to make explicit the detailed conventions, processes and procedures of the musical style, genre or tradition being studied;
- demonstrate or articulate precisely what skills need to be learned and draw pupils into the process of modelling so that they understand how to improve their learning;
- provide a role model by acting as a musician – inspiring pupils with the passion and skills with which teachers can perform and compose;
- use pupils' existing skills and experience to demonstrate musical ideas to their peers;
- identify how demonstrations, workshops or other live events can enhance the learning of a specific unit of work;
- build upon a department's awareness of standards by using a portfolio of work to demonstrate expectations.

As a result, pupils:

- understand the conventions, processes and procedures that are key features of the music being studied;
- know about the expectations of learning, know what skills will be needed and understand how to accomplish tasks to a good standard;
- are inspired and engaged by examples of musical excellence;
- use prior learning to work independently of the teacher, being clear about the musical skills, processes and procedures they need to use and how to improve them;
- feel they have succeeded, and demonstrate improved confidence.

Background

A range of inspection and research evidence identifies common issues for modelling in music. It also describes how successful teaching finds solutions that enable positive musical learning. The main characteristics are outlined below.

Common issues

When pupils are asked to explore an aspect of music, they often lack:

- sufficient knowledge of the conventions, processes and procedures of the musical styles, genres and traditions in which they are asked to work;
- sufficient knowledge and experience of procedures they need to follow to improve their learning: they do not know how to get better;
- the confidence to tackle the challenge due to insufficient skill base, lack of opportunities to explore and test out their ideas or an insecure learning environment;
- the vocabulary needed to communicate the knowledge they have of the subject and to evaluate what they have produced.

Pupils can be uncertain about expectations related to skill development and often struggle to apply their knowledge and understanding of musical devices and features in practical work.

Resolving the issues

Modelling can be used to address the common issues outlined above. A number of modelling strategies support the teaching of music, helping to make teaching and learning more effective. They all require pupils to hear music, engage with the thinking of a 'specialist', and be directly involved in the processes of music making.

This unit explores three distinct contexts where modelling takes place, i.e.:

- to clarify musical conventions, processes and procedures;
- to clarify how to develop and improve skills; and
- to build confidence, inspire and demonstrate expectations.

In addition the unit explores seven processes involved in modelling, i.e.:

- Thinking aloud as part of the modelling process
- Careful planning and use of questions
- Accommodating different learning styles
- Language for learning – modelling talk
- Developing pupils' confidence
- Using specialist musicians from the whole community to inspire
- Creating a portfolio of evidence

Each of the processes can be applied to each modelling context. For the purposes of this unit, each process is explored within just one context, demonstrating how modelling processes can maximise impact on particular aspects of pupil learning.

To clarify the nature of these modelling contexts and processes, this section now outlines the three contexts for modelling in music. It also summarises the features of the processes that have been linked to each context within the unit. For further generic guidance on Modelling, you can see either *Pedagogy and practice: Teaching and Learning in Secondary Schools*, Unit 6: Modelling (DfES 0429-2004 G) or *Training materials for the foundation subjects* (DfES 0350/2002).

Modelling to clarify musical conventions, processes and procedures

Use live musical demonstrations to model what pupils should be investigating by talking through and sharing the processes involved.

Thinking aloud as part of the modelling process

- Introduce the 'big picture' and the wider implications of the work.
- Identify and 'walk through' the steps for learning within the modelling opportunity and associate these with the learning outcomes.
- Share the thinking, making the mental and practical processes explicit.
- Develop metacognitive thinking within pupils as the modeller 'thinks aloud' and slows down the difficult parts of a process or skill and repeats the modelling until the skills are acquired.
- Offer opportunities for pupils to talk about their musical task, ask their own questions, offer contributions and test their ideas.

Careful planning and use of questions

Prepare the lesson well and by using careful questioning or discussion to make explicit the conventions, processes and procedures being developed, draw pupils into the modelling process.

- Well-planned modelling should engage the pupils with structured tasks that focus the observation on specific processes and technical skills.
- Model just a small part of the activity and encourage pupils to practise and secure the first step before moving on.
- Use a planned sequence of musical demonstration combined with questioning or discussion ensuring that the development of skills or thought processes is explicit within the modelling episode.
- Build into the modelling process time for reflection allowing pupils to consider the processes and skills being developed and how they have learned.
- Use open or closed questioning during modelling episodes to identify together what pupils need to know or what skills they need to learn in order to meet a particular challenge.

Modelling to clarify how to develop and improve skills

Use modelling strategies to articulate how pupils can improve, by demonstrating the skills to be learned and how to acquire these skills.

Accommodating different learning styles

- Use a variety of approaches when modelling, ensuring that all pupils can readily absorb the information.
- A combination of visual and aural supported by oral explanation is of great benefit to pupils who struggle to visualise concepts just by listening to the modeller speak.
- Link all modelling to the learning outcomes of the lesson, identifying the ultimate aim of the lesson and engaging all pupils in the decision-making process.
- Bear in mind that when pupils are aware of the learning sequence, they are much more likely to think for themselves and become independent learners.

Language for learning – modelling talk

- Encourage pupils' development of a musical vocabulary. Demonstrate and reveal the thinking behind the use of musical language within the modelling process and how language use consolidates the learning by revealing and consolidating thinking.
- Ensure that pupil talk is inevitable, allowing pupils to internalise the processes of skill development.
- Model the use of keywords and phrases, encouraging pupils to develop a music-specific vocabulary and use it precisely and cogently.
- Allow pupils opportunities to talk about their progress and support their learning by modelling the use of specific key words and phrases that will help cement their understanding of new concepts and aid recall.

Modelling to build confidence, inspire and demonstrate expectations

Model expectations with greater clarity and use specialist musicians to inspire and enhance pupils' learning in an engaging and challenging process.

Developing pupils' confidence

Develop pupils' confidence using modelling strategies designed to support all pupils and engage them in the learning opportunities.

- Establish rules for the session enabling every pupil to feel secure in the classroom, not afraid to ask questions, willing to take risks and to accept that making mistakes is part of the learning process.

- Encourage peer modelling as a strategy to support confidence and create a secure classroom climate.
- Repeat the modelling of a particular process whenever necessary to completely demystify a skill or technique. Repetition encourages the pupils to participate and engage with the learning, fostering confidence to take the step-by-step approach to meeting the learning outcomes.
- When introducing new skills and techniques, allow sufficient time for pupils to become familiar with the conventions, processes and procedures of the work.

Using specialist musicians from the whole community to inspire

Take full advantage of the musical skills and talents of people in the whole school and wider community.

- Use specialist musicians to inspire and enhance pupils' learning in an engaging and challenging process.
- When members of the wider community are invited into the classroom to model techniques and skills, it is important that they are briefed and encouraged to make explicit the skills, processes and procedures to be shared.
- Peers can also be used in effective modelling, demonstrating the qualities of their understanding of the task in a way that builds confidence in others.

Creating a portfolio of evidence

- A well-maintained departmental portfolio of previous pupils' work can provide excellent support for the modelling process by helping to set learning goals and endorse that the tasks are achievable.

Modelling to clarify musical conventions, processes and procedures

Thinking aloud as part of the modelling process

Pupils need to receive explicit information in the modelling process. This can be made more effective if modellers share (think aloud) their actions, thoughts and feelings when demonstrating how musical styles, genres and traditions work, and how to develop musical skills. Encouraging pupils to interact and engage with the modelling episode will support their understanding of how music is constructed and how music has been influenced by time and place.

Modelling provides a good opportunity to explore difficult points (or 'hot spots') of learning within lessons. Talking through the complex aspects of a musical convention and showing pupils musically how such aspects can be mastered will further support the pupils as they aim for a successful realisation of the challenge.

Reiterate the expected learning outcomes of the session and relate the modelling episode to the 'big picture'. For example, relate the modelling of a particular skill to the learning of the wider unit (i.e. relate how performing a syncopated phrase by counting aloud or using syllable rhythms to support the development of playing rhythmic patterns can help in a whole-class samba performance).

Pupils should also have opportunities to think aloud as they begin to process the information received in the modelling episode. They should be encouraged to talk about their understanding of the conventions being modelled with their peers. They should also be encouraged to ask pertinent questions of the modeller, to help consolidate understanding of the processes and procedures being demonstrated.

Task 1

Talking through the process — **20 minutes**

Watch Video 4a during which the teacher models two aspects of the processes involved in composing a blues melody. Pupils have previously learnt about the context of blues, and the basic structure of the traditional blues sequence.

Using the observation sheet below as a prompt, identify the ways in which the teacher 'talks through' the conventions, processes and procedures of a blues song, in order to bring clarity to the modelling sequence. You will need to watch both aspects of the process in order to identify all the features listed on the prompts. Compare your notes with the analysis in the appendix on pages 29 – 30.

Analysis of Video sequence 4a – Observation sheet (for use in Task 1)

Key features identified **The teacher:**	**What are the thinking aloud strategies that will help pupils understand?**
shares the thinking	
repeats the modelling process, sometimes slowing down the difficult concepts	
provides opportunities for pupils to discuss and ask questions about the task	

Key features identified **The teacher:**	**What are the thinking aloud strategies that will help pupils understand?**
encourages pupils to test their ideas	
introduces the 'big picture' and discusses the wider implications of the work	
'walks through' the steps for learning and associates them with the learning outcomes	
analyses the processes and promotes pupils' thinking about the way they have learned	

Further examples of opportunities to use thinking aloud strategies in modelling opportunities include:

- thinking aloud the processes involved in creating an authentic rhythmic accompaniment to a group performance of a rap using a sequencer program;
- identifying explicitly the steps to learning required to compose a short extract of film music based on a horror theme – modelling the selection of timbres, the specific use of melodic devices and the use of electronic sound effects;
- considering oral commentary, carefully placed, to support an ensemble performance of a gamelan piece by a group of pupils from the class mentioning key points regarding the qualities of the performance such as energy, fluency, how well cues were given to change tempo, etc.;
- slowing down and isolating difficult passages of a ballad, demonstrating carefully the technical singing issues that the pupils could encounter within a performance: breathing, phrasing, diction, etc.

Task 2

Placing thinking aloud strategies in your teaching repertoire **30 minutes**

Using the findings from Task 1, and reflecting on the other opportunities listed above, consider ways of developing the use of some of the thinking aloud strategies in your teaching.

Choose a class that you feel confident with and a lesson where modelling a particular convention or skill needed to access a tradition would be useful.

Plan to use a new strategy in this lesson, keeping the demonstration short and focused.

Reflect upon the outcomes from the lesson.

Have pupils gained a clear understanding of the skill or concept being developed and can they carry out the task successfully on their own?

Which aspects of the modelling episode could you improve next time?

Careful planning and use of questions

Prepare for the modelling episode of the lesson well, particularly if you are intending to demonstrate a new feature of a musical style or how to develop a new skill. Anticipate where pupils are likely to struggle (the 'hot spots' of learning), think through the problems they face and plan the modelling episode so that these are addressed. It is important to rehearse the skill in advance and to identify what the modeller will say during the demonstration. Ground rules will need to be established in order to make the most of the modelling opportunities.

Modelling is most effective when both the modelling episodes and the pupils' first attempts are scaffolded by employing resources that précis or recall prior knowledge. Scaffolding helps the learner to connect prior learning with new learning. It involves a teacher guiding pupils' learning through interactive direct teaching (e.g. modelling, demonstrating and questioning) and also by constraining the tasks set to provide focus and support. Limiting the scope and freedom of the activity reduces ambiguity while retaining challenge, enabling the teacher to manage the pace and process by which pupils take increasing control of the task and the learning.

Scaffolds in music could take the form of:

- a bank of chords or a given chord sequence, both of which impose constraints;
- vocabulary lists or the main characteristics of a particular musical style or genre which support a piece of extended writing or a group talk activity (see Resource 5e for an example of a vocabulary grid which supports work on South American dance music);
- a graphic representation of a piece of music that provides a framework for locating specific features in a listening task;
- a skeleton score that provides a rhythm as a basis for a melodic composition along with a restricted number of given pitches to work with;
- a series of differentiated parts for whole class performance or a given set of MIDI sequences for pupils to arrange and 'voice' using an ICT programme;

Importantly the scaffold is used in each case to help focus on the development of specific understanding or skills.

KWL grids

When preparing a modelling episode teachers sometimes make assumptions about what pupils know and what they need to know in order to move their learning forward. In doing so, they can overlook some of the barriers that pupils will face. One strategy which

a) encourages pupils to consider for themselves what they need to know or understand in order to compete a task; and

b) informs the modelling process

is the use of KWL grids. A KWL grid allows teachers and pupils to identify what they already **K**now, what they **W**ant to know (asking pertinent questions) and record what they have **L**earned. KWL grids can be used in a number of teaching and learning contexts where pupils are required to anticipate or reflect on their learning.

When modelling, KWL grids can help pupils understand how to improve by:

- keeping their own working record of the modelling process i.e. their understanding of how to approach a particular task independently;
- identifying, as the modelling episode is taking place, any aspects of learning about which they require further clarification;
- providing a prompt for feedback to the teacher to inform the modelling process.

KWL grids can therefore be used before the modelling episode (to inform the teachers' planning of the modelling), during the modelling episode (to inform the pupils' thinking process) or after the modelling episode (so that pupils can identify where further clarification is needed).

The following are three examples of KWL grids completed before the modelling episode. The first two examples show the use of a KWL grid for an individual activity. The third example shows how a KWL grid can be re-visited across a whole unit. In each example, the teacher and pupils have agreed and completed the 'what I know' and 'what I have learned' columns together and individual pupils have completed the 'what I want to know' column. In all three examples the 'pupil' questions are then fed back to the teacher in order to inform the modelling process, identifying where the emphasis of the modelling episode should lie. It should be noted that these examples show only one of a number of ways of using the grid. Numerous applications and uses of KWL grids can be found at www.standards.dfes.gov.uk (search: KWL grids)

Example 1: A single activity taken from a unit of work called: Understanding the conventions of reggae

What I know	What I want to know	What I have learned
How to construct a triad	How to sequence these triads to make a chord progression suitable for reggae Is it possible to use them in any order at all or should a pattern emerge?	Use the formula of ascending and descending triads (C, Dm, Em, Dm) to help structure a sequence and demonstrate understanding of the concept

Example 2: A single activity taken from a unit of work called: Understanding the conventions of dance music

What I know	What I want to know	What I have learned
What rhythm structure will be used in a piece of music for a 'stomp' style dance	How to enter the rhythm into a software-based drum machine program and repeat it for a whole section of the music Do I have to enter the rhythm into the program eight times or is there a shortcut?	How to select the timbre or sample for my recording How to build and layer the rhythms to generate increasing excitement in the first section of the dance How to enable the loop facility within the program or how to copy and paste the rhythm for the entire section of music in which it will feature

If you want to know more about using software-based drum machine programs, you can go to the Practical Support Pack module called Developing samba rhythms.

Example 3: Three activities from a unit called: Understanding the conventions of the blues: see Appendix 2

Task 3

Planning to use a KWL grid — 30 minutes

Choose a modelling situation during which it would be appropriate for pupils to generate their own questions and develop a sense of what they need to know to realise the task. Create a KWL grid with their prior learning already identified in column 1 and the expected pupil outcomes in column 3.

During the active modelling session, ask the pupils to complete column 2 recording questions relating to any aspects that need further clarification in order for them to successfully approach and realise the task. Support this process with prompts and reinforcements along the way. This information should then be either fed back to the teacher so that the process can be repeated (focussing on these specific aspects) or retained by the pupils for clarification on an individual basis later on.

Reflection

After the lesson, identify and jot down your thoughts concerning how successful the use of this strategy was, and ways in which you might improve its use. Plan to develop the strategy in other modelling opportunities.

Use of questions when modelling to improve pupils' musical understanding

When modelling conventions or specific skills, it is important to ask pupils a range of questions

a) to check that pupils understand both the knowledge involved and the processes by which they can apply that learning in practical exploration of the music; and

b) to draw pupils into the modelling process.

Consider both closed and open questions when planning a sequence of questions to improve what and how pupils learn. For example, when modelling a written appraisal of a piece of film music, a closed question could relate to the identification of a particular timbre, whereas an open question could consider the interpretation of changing emotions within the music, or the reasoning about subtle changes in musical texture.

Planning questions using Bloom's taxonomy

The use of a series of carefully planned questions with different levels of challenge engages pupils with the modelling process. Bloom's taxonomy (Bloom and Krathwohl, 1956) is very useful both in planning objectives and in planning increasingly challenging questions. It can also enable effective differentiation of future tasks (i.e. setting more-able pupils advanced challenges that explore more creative aspects of the musical style, genre or tradition being explored).

The taxonomy classifies educational objectives into groups according to the level of cognitive complexity involved and kind of thinking needed to meet the objectives.

Bloom assumed that the objectives could be placed in a hierarchical sequence, from knowledge (the least complex kind of objective) to evaluation (the most complex and the one that demands higher-order thinking).

In summary, Bloom's taxonomy suggests that people first need to acquire knowledge before they can understand the knowledge. They need to be able to understand the knowledge before they can apply it to different contexts. They need to be able to apply knowledge before they can analyse, question or infer from the knowledge. Only when they have done that can people combine different kinds of knowledge to create new knowledge. Finally, when people are able to combine knowledge in this way, they are then able to evaluate. Moving between these stages demands increasingly complex thinking on the part of the learner.

You can also use the steps in the taxonomy to plan sequences of questions in a music lesson. By sequencing questions in this way, you can help pupils to deepen their understanding, to develop their thinking skills and to become more effective learners.

The following table links the steps in Bloom's taxonomy with the types of task pupils might be expected to do and the kinds of question that would help them in those tasks.

Cognitive objective	What pupils need to do	Links to thinking	Possible questions
Knowledge	Define Recall Describe Label Identify Match	Pupils are more likely to retain information if it is needed for a specific task e.g. a task is being modelled and linked to other relevant information. Do your questions in this area allow pupils to link aspects of knowledge necessary for the task?	What is the name of … related to the instruments of a traditional Irish folk band? What is the name of the rhythmic style often used in jazz? Where on the score would you find a clef?
Comprehension	Explain Translate Illustrate Summarise Extend	Comprehension questions require the pupils to process the knowledge they already have in order to answer the question. They demand a higher level of thinking and information processing than do knowledge questions.	What are the main characteristics of Indian ragas? Why is reverb often added to vocals in a pop ballad? Why do you think all the violinists sit together in the orchestra?
Application	Apply a new context Demonstrate Predict Employ Solve Use	Questions in this area require pupils to use their existing knowledge and understanding to solve a new problem or to make sense of a new context. These questions demand complex thinking. Pupils are more likely to be able to apply knowledge to a new context if it is not too far removed from the context with which they are familiar.	What do you think will happen if we change the selected timbres of the music? Where else could we develop the use of an ostinato pattern in this piece? Is it possible to use some of the verse or chorus as an introduction? What alternative chord selections could we make?

Cognitive objective	What pupils need to do	Links to thinking	Possible questions
Analysis	Analyse Infer Relate Support Break down Differentiate Explore	Analysis questions require pupils to break down what they already know and reassemble it to help them solve a problem. These questions are linked to more abstract, conceptual thought, which is central to the process of enquiry.	Why does the composer modulate to the relative minor in this piece of film music? How is the difference between the sampled strings and live instruments used in the recording? What is the function of the ostinato pattern used in this dance music?
Synthesis	Design Create Compose Reorganise Combine	Synthesis questions demand that pupils combine and select from available knowledge to respond to unfamiliar situations or solve new problems. There is likely to be a great diversity of responses.	Can you suggest a different ending within the melody of this piece? How could you arrange the music differently in terms of changing the timbres selected or reorganising the structure of the piece?
Evaluation	Assess Evaluate Appraise Defend Justify	Evaluation questions expect pupils to use their knowledge to form judgements and defend the positions they take up. They demand very complex thinking and reasoning.	Can you justify why you have finished your piece so abruptly? Can you give some reasons as to why you prefer ska to calypso?

Task 4

Questioning – self-review **20 minutes**

For one lesson or in a modelling episode within a lesson that you teach, write down or make an audio recording of all the questions you ask. You may consider forming a partnership with another teacher to monitor the use of questioning within your lessons.

Analyse the questions you have asked, using a grid like the one below. Match the types of questions against Bloom's cognitive objectives and make comments in column 3 as to the impact made upon learning.

Question posed	Cognitive objective	Impact on learning
What do we call the persistently repetitive melodic or rhythmic phrase that I am demonstrating?	Knowledge	Helps pupils to remember a key musical term.
Can you tell me why the rhythm patterns on that track that I have just modelled are inappropriate for rave music?	Analysis	Requires pupils to break down what they already know and reassemble it to help them solve a problem.

Resource 3a shows how one teacher formalised the use of questions based around Bloom's taxonomy to model the aural analysis of a piece of jazz music ('Night Train'). It also shows how pupils were able to use this modelling as they developed their own writing about the music.

Modelling to clarify how to develop and improve skills

Accommodating different learning styles

Pupils learn in a variety of ways and therefore need the modelling process to accommodate a range of learning styles. A combination of visual, auditory and kinaesthetic demonstration accompanied by oral commentary entices all pupils. Look again at the blues lesson in Video 4a, noticing the way in which the teacher uses different visual and oral prompts within the modelling episode. Look at Resource 4a to see an exemplar resource for listening which enabled pupils to engage with the task in different ways using written language, symbols, card sorts and physical modelling. Such a combination has particular benefits for pupils learning English as an additional language.

Some pupils with special educational needs benefit from having processes modelled in a clear and concrete way and where strategies such as 'no hands' are employed to ensure that they feel included.

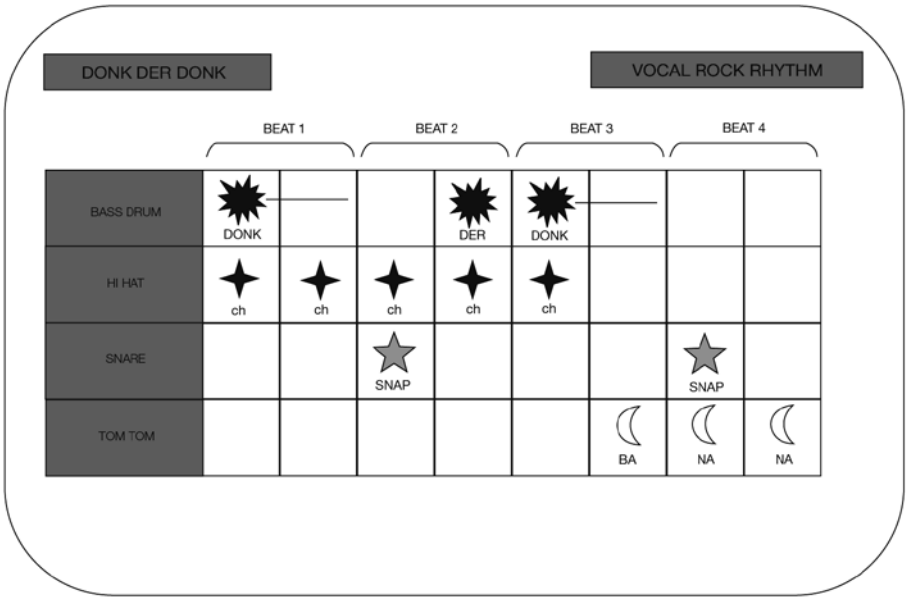
Modelling that caters for a variety of learning styles will support the development of independent learners. This results in pupils who are aware of the learning sequence, know how to tackle the challenge and can think of solutions for themselves.

Case study 1

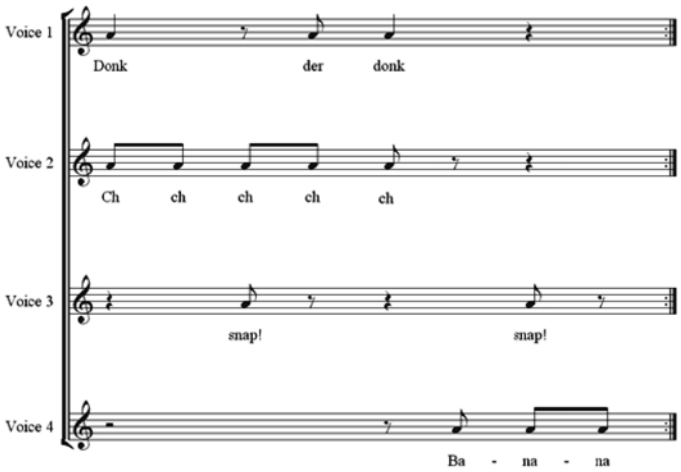
Accommodating different learning styles

A Year 7 mixed-ability class was exploring the construction of a standard rock rhythm using just their voices and body sounds. The teacher was modelling pupil expectations and outcomes from the task using a variety of resources aimed at engaging all pupils in the challenge. The pupils worked in groups of four to realise the task.

The modelling was structured and well planned. A variety of scaffolds were provided to support the pupils with their thinking. These included a graphic realisation of the task and a fully notated musical score (see below), allowing the pupils to follow the modelling process and see how the components fitted together.

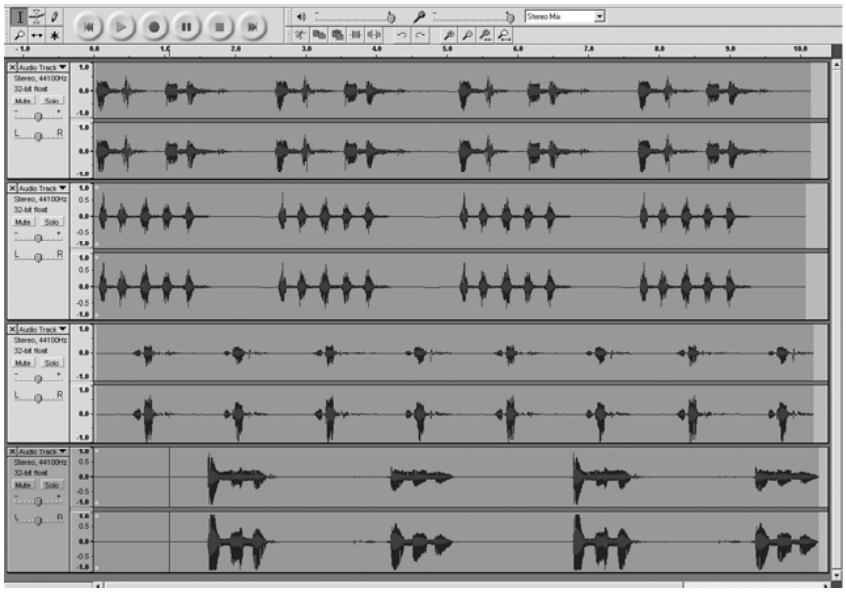


'DONK - DER - DONK'



The teacher then modelled aurally the ways in which pupils could use their voices to create one of the four percussion parts. Audio recording software was used to capture the teacher's voice as the four parts were performed, layering one sound onto another until all four parts were added to the sequence. The teacher was able to display this information as the recording software played through the rhythm cycle. The teacher provided an oral commentary when playing back the recording, making suggestions and tips as to how pupils might tackle the task and how they could add variety to their performance.

The following screen shot shows four cycles of the same pattern, after the recordings had been completed.



Pupils were encouraged to add movements to their performances so that they physically engaged with and embedded the rhythmic patterns in their ensemble work, thus the kinaesthetic learner was accommodated.

If you want to know more about using audio recording software, you can go to the Practical Support Pack module called Drum chant.

Task 5

Developing resources to support all learners — **1 hour**

Think about the ways in which you scaffold the learning experiences for a particular class. When you are next modelling how to improve a particular skill, develop a range of support materials that will accommodate a range of learning styles (visual, auditory, kinaesthetic).

After the lesson, identify the impact on different groups of pupils. Notice which version of the materials had the greatest impact on most pupils.

What does this tell you about the preferred learning styles of your pupils, and what sort of resources you might develop next?

Mid-unit review

At this point in the unit, it is worth reflecting on how you have developed your understanding of the unit's principles, and the impact of this on your classroom practice.

Look back at the 'Recognising impact' statements on page 2. Identify and consider how you can develop further:

a) principles described in the first section which you now understand more securely and which are a more consistent focus for your teaching;

b) detailed strategies from the second section which are used more frequently in your teaching and which deliver intended learning more effectively;

c) positive changes you have noticed in pupils' learning or engagement, and how you can best build on them as you work through the remainder of the unit.

You may also wish to re-visit some of the unit to embed the new practice more securely before moving on to new ideas. Alternatively, if certain strategies have been particularly effective with one class, you may wish to use them with other classes, and to share the impact more widely across the department with colleagues.

Language for learning – modelling talk

The Strategy's *Literacy across the curriculum training materials* (DfES 0235/2001) emphasise the importance of modelling in developing the skills of speaking and listening and writing. All music teachers have a specialist vocabulary and ways of expressing conventions, processes and procedures that are important to support understanding of a range of musical concepts. Critically the proper use of this vocabulary can also help pupils to articulate how they can improve their learning.

By orally rehearsing and talking through their demonstration sequence, teachers model the use of this specific vocabulary and encourage pupils to use it in their own talk. Opportunities for pupil talk are essential, as considerable time is required to internalise the language for learning and cement understanding of the skills or processes being discussed.

Case study 2

Modelling – encouraging pupil talk

Over the last year, pupils from a Year 8 mixed-ability class have performed a number of songs in a variety of styles and genres. Using a checklist provided by the teacher, they identify a range of features and characteristics of each song.

Working in small groups, they then are asked to select one preferred piece to talk about to the whole class, justifying their choice. The teacher models this process by choosing an additional song and explaining, using appropriate musical vocabulary, why the choice has been made, giving illustrations from the piece. This models how pupils can use language to evaluate music and justify opinions.

In their groups, pupils practise using language in an accurate and persuasive way. They give group presentations and respond to the presentations of others.

Task 6

Teaching sequence for modelling the use of a musical vocabulary — **30 minutes**

Plan a modelling opportunity where you are able to demonstrate the use of aspects of subject-specific vocabulary. It could be related to numerous learning activities, such as how to use compositional processes from a specific style, how to evaluate a performance, or how to identify features and conventions within a listening and appraising task.

Consider the following points when planning an effective modelling session designed to encourage an evolving musical language base for the pupils:

- Use short, clear sentences for maximum effect and identify in advance the subject-specific key words and phrases that you want pupils to learn.
- Provide a spoken commentary on the process of how to develop your own performance or composition or that of a group in order to inform, explain or evaluate.
- Make the commentary coherent by considering the sequence of 'how to' points and how they can be linked.

Use of talk as a tool for developing thinking

Teacher modelling of this use of talk supports pupils in understanding how a process works. Pupils need both specific vocabulary support for hypothesis/speculation and help with managing their contributions to group work. For example, pupils working in groups could talk about whether it is possible to use a repetitive bass riff to support the chord structure within a composition. They would not only need to experiment practically in terms of matching the riff to the harmonic structure, but would also need to be able to articulate those thoughts precisely and cogently. This would require a wide musical vocabulary and an embedded understanding.

An effective strategy is to initiate exploratory or hypothetical talk by using tentative language, rather than by asking questions. Begin a discussion by wondering out loud, or offering a hypothetical statement of your own. Pupils will tend to emulate the use of language, especially if key vocabulary is displayed within the learning environment. An example might be when modelling a particularly complex concept, such as the changing texture within a piece of film music, or by changing parameters within a composition using electronic sound sources. By hearing particular language which suggests future directions for their work, pupils are made to think creatively and apply the language to their own work – 'what if we tried to …'

Monitoring pupils' talk to identify their understanding

Listening to pupils talk about their progress within a task will reveal their understanding of the skills or processes that were being modelled and the effectiveness of that modelling episode. After modelling how to develop a compositional idea, using specific vocabulary, listen to pupils as they talk to their peers in pairs and small groups. Speaking frames could be considered as a structured approach for the discussion, and teacher prompts and praise will help consolidate the use of specific terms associated with the task.

Task 7

Using a structured approach to language development to monitor the impact of modelling — **30 minutes**

Evaluate the success of the modelling session identified in Task 6 by using one of the strategies for encouraging group talk from *Literacy in music* (DfES 0261-2004).

For example, use a spokesperson strategy to organise group discussion. A member from each group is appointed as spokesperson to summarise how they have been developing the use of a particular convention, process or procedure within a composing task. The spokesperson is required to feedback using subject-specific vocabulary, each group being asked in turn to add something fresh to the discussion.

Develop a structured plan, to gather evidence from the pupils.

Which examples of musical vocabulary that you modelled did you hear the pupils use?

Did the pupils use the musical terms precisely and cogently in order to articulate their understanding of how to improve?

What problems did the pupils encounter, especially in using language to describe their work?

What could be done in the next modelling session to overcome these problems?

Modelling to build confidence, inspire and demonstrate expectations

Developing pupils' confidence

Pupils need to feel confident to fully express themselves musically in a creative and performing context. They require frequent opportunities to develop confidence in their ability to experiment with musical processes and procedures and to develop the mastery of performance techniques using the voice or playing an instrument. Effective modelling of performing and composing conventions will encourage pupils to engage and participate more readily in the music-making opportunities made available to them.

Peer modelling is a strategy that builds confidence in pupils. They will sometimes see adults who model skills or techniques as specialists and experts, demonstrating levels of creativity or virtuosity well beyond their capabilities. When peers are the modellers, pupils are more likely to see the skills being demonstrated as attainable and will be inspired to develop the same skills. Peer modelling is a 'developing' feature of the Musical Futures initiative (www.musicalfutures.org.uk) where instrumental skills for example are often 'cascaded' using peers as models. With some care taken to ensure that pupils use an effective, oral commentary to develop their contributions (i.e. moving them from explanation or demonstration to modelling), the approach becomes increasingly persuasive and powerful as a classroom strategy for developing pupils' confidence.

Task 8

Modelling to build confidence

30 minutes

Prepare a modelling episode for Year 8 pupils that will help them acquire a specific performance or composing skill. For example, a modelling episode involving how to improvise successfully a melody within a big band style while performing to a sequenced MIDI file accompaniment.

Consider the following points as you prepare the modelling session:

- Anticipate where pupils are likely to struggle and plan to address those specific points.
- Keep the modelling short and fully focused on the expected pupil outcomes.
- Encourage pupils to feel secure in the learning environment and therefore able to begin to take risks and accept making mistakes for example, foster confidence by slowing down the modelling of keyboard techniques.
- If appropriate use peers to model effective work. Make sure that these pupils can not only demonstrate but also explain what they are doing and why – by talking about the steps they have taken to reach a successful outcome.
- Involve pupils in the decision making, allowing them to have ownership of the learning – for example, encourage pupils to decide the length of the improvised sequence, the tempo of the backing MIDI file, the selection of the timbre or sound sources they are to use, etc.
- Allow pupils to engage quickly with the task after the modelling process has finished – have resources already prepared for immediate interaction once the modelling is over.
- Break the learning down into small tasks and encourage pupils to practise small steps until their confidence grows.
- Plan to repeat the modelling sequence whenever necessary in order to demystify a skill or technique – this can be achieved in a variety of ways such as during a whole-class plenary, or as small-group or individual intervention.

You may want to watch Video 4b. It shows a teacher modelling how to create a 'characterful' melodic motif for use in a more extended 'programme music' composition. The pupils have already explored the principles of programme music, the poem 'Danse Macabre', and the nature of the main characters in the poem – 'Death' and 'Skeletons'. They are now about to create a motif that musically represents their view of the character 'Death' (the descriptive words on the board were suggested by pupils earlier in the lesson). When observing the sequence, consider the effectiveness of the episode and the ways in which the teacher builds confidence and demonstrates expectations.

Reflection

Consider the effectiveness of the planned modelling session developed in this task. Monitor the engagement of pupils and recognise any improvements in their motivation and application towards the task. Consider how you could apply the same modelling techniques to a different musical challenge.

Using specialist musicians from the whole community to inspire

Pupils need to be inspired and have the opportunity to take a very close look at accomplished musicians 'in action'. These will include the class teacher and pupils with advanced musical skills. Inviting external performers into the classroom to model particular skills or techniques can also have enormous benefits on pupils' and teachers' understanding of musical conventions, processes and procedures from a variety of diverse musical styles, genres and traditions.

The visiting musician might be a parent, a peripatetic music teacher from the LA Music Services, a locally known musician or group, or another teacher from within the school. Often, peers can be used as experts and effectively model their understanding of a challenge or task. With the teaching repertoire so broad at Key Stage 3, an individual music teacher will struggle to be an expert in all areas of the music curriculum. Using experts in the classroom has a real benefit when considering, for example, the musical traditions of another culture or a musical genre vastly different from the music teacher's experience and strengths.

Both the Primary Instrumental and vocal tuition at KS2 (DfES Resource 5f – see p.8-9) and Musical Futures (www.musicalfutures.org.uk) are good examples of initiatives that have resulted in wide ranging and dynamic long term partnerships being created between schools, music services and community musicians.

Opportunities to take pupils to the modeller are another consideration. When performances and recitals are identified in the local community, organise a class visit or encourage pupils to attend the event. This will add greatly to pupils' understanding of musical genre and purpose.

Task 9

Strategies for using the modelling of specialist musicians effectively — **30 minutes**

Once musicians willing to participate in modelling have been identified within the local community, their use has to be carefully planned and negotiated in order to meet the learning needs of the pupils.

The modeller will need to be briefed and informed about:

- making explicit the processes, procedures, skills and techniques to be shared;
- providing an oral commentary (if appropriate) while modelling;
- repeating the process;
- illustrating key points and slowing down complex techniques.

Design a generic form, such as the example provided below with fictional data included, which will be used to provide information to the modeller.

Modelling session based on improvisation techniques

Musician: David Brown **Date:** 25/1/2006 Class: 9HB

Make explicit the skills to be shared	Improvisations based on the blues scale, using repetition as a key feature
Learning outcomes	Pupils will be able to improvise a solo 12-bar blues melody based on the blues scale, repetition and emphasising the use of blues notes. Most pupils will improvise on electronic keyboards, some will improvise on guitar and one child will improvise on clarinet (B flat – Grade 5).
Pupils' prior knowledge and understanding	Pupils have improvised on several occasions before. They have improvised using the pentatonic scale, the whole-tone scale, Indian ragas and Indonesian or gamelan restricted-note scales. They are used to building short repetitive rhythms and melodic motifs and understand the chord structure of the blues.
Provide an oral commentary helping to illustrate key points	Talk through the techniques that will be modelled – openly discuss the patterns to be developed and the thinking about the improvisation, including: • starting points, finishing strategies; • relating to the chord structure and use of the blues scale; • developing repetition of a melodic phrase.
Slow down the process	Slow down the difficult passages, e.g. where pupils might struggle to register a chord change. Identify key techniques and model these in 'slow motion' – e.g. the use of the blues notes as acciaccaturas.
Repeat the process	Repeat the modelling several times, supporting the pupils as they attempt to realise the task for themselves. Small steps work best: allow the pupils to work at individual phrases, committing them to memory, before moving on.

Creating a portfolio of evidence

Specialist musicians can model the processes and skills of music live, but recorded examples that show expectations of musical outcomes can be equally effective in enabling pupils to understand the quality of work they can achieve. Departments should create a portfolio of evidence, with examples of pupils' work showing outcomes at and beyond expectations for each unit of work.

Recordings of most classroom work are probably already taken: in order for these to be used effectively with pupils during lessons as models to work towards, the department should agree at least three pieces for each unit that demonstrate key features of the expected outcomes.

This will:

- enable the department to reach common understanding about the standards of work it expects in each unit;
- enable teachers to use the examples of previous pupil achievement in lessons, modelling through them the specific aspects of musical work that pupils should aspire to.

Task 10 **Reviewing pupils' work** **1 meeting**

Use the next departmental meeting to agree which examples of pupils' work represent outcomes at, below or beyond expectations for a given unit.

Make sure that recordings are either mastered onto one disc or tape or organised into discrete computer files, and that there are agreed statements about what each example demonstrates and the reason why each is a model of a satisfactory or good musical outcome.

Plan how these examples can be used as models with pupils the next time this unit is taught.

The Musical Futures initiative (www.musicalfutures.org.uk) explored the ways in which a web resource can be developed to contain numerous examples of pupils' work linked to specific projects. The strength of the resource is that it can be accessed by all teachers and pupils (as models that demonstrate expectations and inspire), at any time and from any place. A new web site, numu, will develop some of these ideas from September 2006 so that pupils can share and promote their own music on a national basis.

Next steps

This unit has explored an aspect of teaching and learning. You may wish to develop your ideas further, to consolidate, apply ideas in different contexts or explore an aspect in more depth and innovate.

Reflection

Refer back to the 'Recognising impact' statements on page 2 and your planning sheet for this unit. Use these to evaluate:

- the impact of this unit on your teaching;
- the impact on pupils' learning.

Developing practice

Here are some suggestions for developing your practice further:

- Identify a particular subject skill, process or procedure that you feel a particular class or group of pupils do not do well. Plan how to model it well. Do this repeatedly over a period, perhaps of three lessons in different contexts, and then evaluate the impact of the modelling on your pupils' performance. Does repetition make a difference? Is there an optimum number of times you need to model?
- Investigate the difference in pupils' understanding when modelling is used as opposed to demonstration with clear explanations.
- Involve pupils in modelling, by inviting them to plan how to teach others to perform a particular process or procedure. Evaluate the impact of asking them to teach from their own understanding.
- If you have teaching assistants or a technician working with you, ask them to help you plan, prepare resources for and (if they have relevant skills) deliver a modelling session. Does working with another adult improve your planning procedures?

Refining the modelling process

Here are some suggestions for refining your practice further:

Consider how ICT can support the modelling process e.g.

- the preparation of modelling videos that can be shown to pupils, 'freeing up' the teacher to develop oral commentary more precisely;
- using 'live' webcams to capture and project close ups of aspects that may be hidden to pupils e.g. to show how different finger patterns can be used to create smooth chord changes on a keyboard;
- develop a department website containing examples of pupil work (possibly with commentaries or annotations) that can be accessed by pupils at school and at home.

When re-visiting skills or processes (e.g. in different contexts) across the key stage, plan for the gradual reduction in the amount of 'scaffolding' required to support tasks to encourage independent learning, and modify modelling episodes accordingly. Over time, analyse outcomes to evaluate the impact of modelling,

remembering to use a full range of evidence (including the views of pupils and the impact of both the processes and outcomes of learning).

Setting targets

Having considered your next steps, you may wish to set yourself some personal targets to support your CPD. You could use these targets to inform your performance management discussion.

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References and further reading

Thinking aloud

Modelling is likely to encourage pupils to use metacognitive thinking; see:

Hattie, J., Biggs, J. and Purdie, N. (1996) *'Effects of learning skills interventions on student learning: a meta-analysis'.* Review of Educational Research 66, pp. 99-136

Modelling can contribute to pupils developing a 'mental model' of a topic; see:

Johnson-Laird, P. N. (1985) 'Mental models' in A. M. Aitkenhead and J. M. Slack (eds) *Issues in cognitive modelling*. Psychology Press. ISBN: 0863770304

Careful planning and use of questions

The following research emphasises the importance of using open, higher-level questions to develop pupils' higher-order thinking skills.

From Benjamin S Bloom Et Al *Taxonomy of Educational Objectives* Published by Allyn and Bacon, Boston, MA. Copyright © 1984 by Pearson Education

Borich, G. D. (1996) *Effective teaching methods* (in particular chapter 8, Questioning strategies). Prentice Hall. ISBN: 002312461X

Morgan, N. and Saxton, J. (1994) *Asking better questions: models, techniques and classroom activities for engaging students in learning.* Pembroke. ISBN: 1551380455

Muijs, D. and Reynolds, D. (2001) E*ffective teaching: evidence and practice* (in particular chapter 2, Interactive teaching). Paul Chapman. ISBN: 0761968814

Wragg, E. C. and Brown, G. (2001) *Questioning in the secondary school*. Routledge. ISBN: 014524952X

Accommodating different learning styles

The road to independence is one that leads from scaffolded support; see:
Vygotsky, L. S. (1986) *Thought and language*. MIT Press. ISBN: 0262720108

Research also indicates that, particularly with younger or low-achieving pupils, certain features will be important in modelling and demonstrating, such as teaching being well-structured into small and sequential steps; see:

Rosenshine, B. V. (1983) 'Teaching functions in instructional programs'. *The Elementary School Journal* 83, pp.335-351.

Language for learning – modelling talk

Useful information concerning the development of a musical vocabulary and its impact upon learning can be found in *Literacy in music* (DfES 0261-2004).

Developing pupils' personal confidence

The following research identifies strategies that are helpful in encouraging pupil response.

Black, P. and Harrison, C. (2001) 'Feedback in questioning and marking: the science teacher's role in formative assessment'. *School Science Review* 82 (June) pp. 43-49

Black, P. et al (2002) *Working inside the black box: assessment for learning in the classroom*. King's College, London. ISBN: 1871984394

Research suggests that 3 seconds' wait time or thinking time is about right for pupils to consider most questions. Research shows that the average wait time in classrooms is about 1 second; see:

Rowe, M. B. (1986) 'Wait time: slowing down may be a way of speeding up!' *Journal of Teacher Education* 37 (January-February) pp. 43-50

Using specialist musicians from the whole community

The Ofsted report and DVD 'Tuning In' (www.ofsted.gov.uk/publications/index.cfm?fuseaction=pubs.summary&id=3591) describe the national pilot of the Wider Opportunities programme. They reference the impact on learning and motivation provided by working with specialist musicians both in and beyond the music classroom.

Appendix 1: Example of a completed observation sheet

(Task 1: Analysis of Video sequence 8a – 'Thinking aloud')

Key features identified **The teacher:**	**What are the thinking aloud strategies that will help pupils understand?**
shares the thinking	The teacher: • uses oral commentary to support each demonstration (with a pre-recorded modelling video clip to 'free up' the teacher, allowing him to commentate with greater clarity) • 'talks through' the thinking behind the 'classic mistake', using the opportunity to reinforce an important blues convention about phrase lengths
repeats the modelling process, sometimes slowing down the difficult concepts	Having modelled a 'classic mistake' the teacher repeats it with more detailed commentary, pointing out where the mistake was made and how to rectify it ('listen out for the fill')
provides opportunities for pupils to discuss and ask questions	The teacher tests understanding of blues phrasing involving them in the task by modelling the 'classic mistake' and eliciting from pupils the precise nature of the mistake The teacher reinforces pupil understanding of the expressive potential of the blues scale by modelling three different versions, asking pupils to evaluate different outcomes by linking these to the context of blues songs
encourages pupils to test their ideas	The teacher improvises a blues melody on one note. In discussion, pupils agree that it needs more notes in order to sound 'bluesy'. The teacher tests out their idea and asks the pupils to evaluate the new version
introduces the 'big picture' and discusses the wider implications of the work	The teacher: • reminds pupils of the learning objectives, locating the task within the broader sequence of learning, prior to modelling how to compose a blues melody • asks pupils during the composition of a blues melody to evaluate 'which melody sounds 'bluesy'?' using the opportunity to remind pupils about the broader social context and its impact on the stylistic conventions

'walks through' the steps for learning and associates them with the learning outcomes	The teacher: • points out the importance of 4 bar phrasing as a convention and constraint and models various outcomes • models how to compose a blues melody using a) a few, b) some and c) many notes, discussing with pupils how each meets their understanding of what makes a good blues melody
analyses the processes and promotes pupils' thinking about the way they have learned	The teacher analyses and elicits from the pupils during the modelling of a 'classic mistake', what the problem was and then demonstrates how to correct the mistake. He points out that by modelling a classic mistake first, the pupils are more likely to remember how to work with the given restriction

Appendix 2: Example of a KWL grid for use across a unit

8YA blues song – KWL grid

What I **Know** (What I can do already)	What I **Want** to Know (What do I need to do?)	What I Have **Learned** (What I need to learn)
How to play the chords of C, F and G.	Do I have to play the chords in a specific order?	To play and sing the song using a 12-bar blues chord sequence.
How to play a walking bass pattern.	How do I combine the chords with the walking bass?	Play the walking bass and chords with one or more of: • doubling notes in WB • playing chords in different ways e.g. rhythm, swung, short, spiky • use of syncopation between chords and WB.
What blues lyrics are typically about.	Do I have to learn a fixed melody to sing? Do the lyrics need a clear structure/order?	Add a vocal improvisation in a blues style considering call and response. Make up another verse using a blues structure (4 lines, use of rhyme etc).

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