

Key points

- Be confident
Pupils, particularly younger ones, quickly realise whether a teacher is in control of the technology.

- Have a fall-back strategy
They respond accordingly. If a projector doesn't work or a computer crashes, children don't want to feel that ICT is the only strand of a teaching strategy.

- Challenge children
At Westbourne primary, Marcel and the other teachers took 10-year-olds into the Windows control panel to change settings. The children were unfazed at exploring an area of the computer that many adults are terrified to enter.

- Challenge their senses
Music isn't just auditory. The visual aspect reinforces the learning experience and makes it more stimulating. If children can "see" music as well as hear it, they're more likely to grasp principles such as pitch, tempo and beat. The music is accessible to a wider range of learning styles.

- Talk their language
"The style of music that children prefer often defines what they feel about themselves," says Marcel. Music created using ICT is a "learning tool that speaks in a language they can relate to". And it enables teachers to create a platform for disseminating more conventional music skills.

- Keep it simple
The basic idea of *O-Generator* is the on-screen circle. Everything stems from that. Children can be overwhelmed by a traditional score.

- If it works, adopt it
Marcel's software partner came up with the circular interface. Marcel didn't object.

Links

- www.bassistry.com
- www.o-music.tv/
- www.sibelius.com
Sibelius Music Software distributes *O-Generator* worldwide
- www.ictadvice.org.uk/downloads/entitlement_doc/entitle_music_prim.doc
- <http://eduwight.iow.gov.uk/curriculum/foundation/music/music/ictresou.asp>
- www.kentled.org.uk/ngfl/subjects/music/qca/ict.htm

O is for original



For once, going round in circles has proved to be a positive thing. *O-Generator* has certainly grabbed the attention of these children

Marcel Pusey can teach children the basics of music without them realising just how much they are learning, writes **Hugh John**

One of the biggest challenges facing music education, says Marcel Pusey, is convincing students of the value of understanding basic music concepts (see *TES Teacher*, October 28). This, he believes, is an attainable goal if teachers use the sounds and language that students are familiar with.

A professional bass player and band leader, Marcel has led education workshops around the country for more than a decade. Dissatisfaction with traditional music teaching methods and available music education software led him and co-creator Mark Welland to develop their own remarkable program, the *O-Generator Learning to Compose* tool.

Mark took Marcel's suggestion to "think outside the box". Approaching the project from a graphic design background, with a love of music but no musical background, he was mystified why musical notation was represented in linear lines. Why not a circle?

Eureka! The circle. The main *O-Generator* screen is a large circle that represents a bar of music. This is divided into 16 segments, with crotchet beats on one, five, nine and 13 and quaver and semi-quaver (16ths) beats

filling in the sub-divisions. Within the outer circle is a selection of coloured concentric circles, each one corresponding to a musical instrument: bass, guitar, drums, piano and so on. When *O-Generator* is running, a bar runs through the 360 degrees, illuminating the circles as it passes through them. Think of the sweep of the second hand on a watch.

So, if the guitar is represented by a blue circle and has been activated when it's lit up on 1, 5, 9 and 13, then it's playing on every crotchet beat in a bar of 4/4. A stunning conceptualisation, more importantly it's one that works incredibly well in the classroom.

O-Generator is about allowing the student to make the choices. They create the sample or loop; they choose where and what notes, and which instruments play. To complement the program, the team developed a learning infrastructure that teaches basic musical terms, and an onboard "virtual assistant" and support system, the *O-Instructor*.

During a session at Westbourne primary school in south London, Marcel introduced a class of 10 and 11-year-olds to the basics of the program. By the end of the lesson, all 30 children had learned how to create a basic one-bar rhythm with accents on beats 1, 2 and 4 using a virtual drum kit, bass and guitar. They were then taught the cut, copy and paste functions of *O-Gen* and how to put together a six-bar rhythm sequence.

The visual aspect of the program made it very easy for the supporting teachers in the classroom to check that the students were getting it right. Were the coloured circles in the right place on the clock face? A point not

lost on teacher Suzanne Cameron: "It was enjoyable to teach with because the children found it so fascinating. Also, as a non-music specialist, I learnt something too."

Non-specialist music teachers and pupils are further supported by *O-Generator*, the on-screen wizard that guides users through the exercises. "If you make a mistake, it will help you," says Amelia, a pupil.

In a wider sense, the children absorbed a very important concept; that music is all about repetition, be it a nursery rhyme, 12-bar blues, 32-bar jazz standard or the AABA sonata form. The circle works equally well as a musical analogy for an extended composition as for a single bar of music.

Technology has given these 10-year-olds the tools and the confidence to lay down a six-bar rhythm track. "It was fantastic," said Charmaine, "because there was no right or wrong." In fact, there was, but mistakes could be undone at the click of a button.

Daniel reckons he "would happily do it [*O-Generator*] all day, all week", while Paige is convinced that "*O-Generator* is one of the best computer games in the world." Transform perception and you transform expectation. The kids believe that they've had a computer games lesson and can't wait for the return of Marcel and his amazing rhythm machine. They might not realise they've had a multimedia tour that has embraced ICT skills (cut, copy, paste), numeracy (number recognition, subdivision) and music (basic composition, rhythm awareness).

That's a heap of learning to get through in an hour.