

Why is teaching composing so challenging? A survey of classroom observation and teachers' opinions

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This analysis of the challenges facing teachers of composing for the General Certificate of Secondary Education (GCSE) is based on a survey of teachers' opinions and classroom observation. The article answers three questions: can all GCSE students compose; how do you teach composing at GCSE; and is GCSE coursework a good test of composing ability? Reference is made to the nature of teaching mixed ability classes, how ability affects the development of composing skills, and the effects of different teaching methodologies on the students' progress. The article questions whether the GCSE examination is a realistic test of compositional ability at age 16.

Introduction

The material presented in this article is drawn from my Ph.D. research project: 'Can composing be taught at GCSE?' The project focuses on the teaching of GCSE composing within the classroom. The main part of my research in schools comprises a detailed record of the students and teachers working together to produce GCSE compositions, and incorporates diaries, interviews, classroom observation, records of work and evaluations of students' work by their teachers. Over 200 students and fifteen teachers in eleven schools are represented.¹ The teachers' opinions discussed here are gathered from interviews, questionnaires and a discussion group funded in 1998–99 by the Teacher Training Agency (TTA). Quotations are recorded verbatim as far as possible.

Can all GCSE students learn to compose?

Music in schools is about the enactment of ideas. (Witkin 1974: 120)

The changes in music education brought about by the work of John Paynter, Murray Schafer and other composer-teachers are reflected in the construction of the GCSE examination. Students approach the central aspects of musical knowledge through four modes of musical experience, engaging in performing, composing, listening and appraising. Developing the skills and understanding associated with these activities will develop each student's musical knowledge and enable them to express themselves through music.

Composing gives students opportunities to explore music from the inside out and to explore inner worlds of musical expression and meaning. Self comments that composing creates:

a living world of music . . . in which the participants are able to enjoy moments of aesthetic pleasure and emotional discovery that are unlike any other, and expressive of inner feelings well beyond the power of words. (Self 1986: v)

When asked 'How does learning to compose at GCSE contribute to a musical education?' teachers responded positively:

'It's central to the course.'²

'Music is doing, performing and composing are at the middle of it.'

'Learning how to compose does contribute to a musical education. It is a valuable discipline to produce the pieces. I believe very firmly in the place of composing in school, and canvassed for the inclusion of composing at GCSE when GCSE was first being devised.'

'Students enjoy the challenge of reconciling problems and the creative freedom composing gives them.'

'Composition aids creativity and confidence.'

However, composing is regarded by some as ultimately a practical activity: an interesting addition to the syllabus, but secondary to the really important area of learnt knowledge and skills of aural analysis and aural dictation. Time spent on producing individual compositions is time taken away from learning the central core of musical knowledge, described variously as aural, aural awareness, harmony and theory, or musical understanding. For these teachers, composing is not a form of knowing in itself; musical knowledge is expressed through recall and application of facts, information and theory invariably in analysis of masterworks. They argue that a student has not sufficient experience of playing and appraising music to be able to compose with full autonomy.

These teachers are justified in pointing out that only until a body of theoretical knowledge and the composing know-how to apply it has been built up through various musical experiences can the student begin to compose like an adult. Making a GCSE composition requires the student to understand and apply conventions of creating and manipulating musical structures to the development of ideas.

Other teachers agree with Self. Composing is a valuable way of learning about music:

'Learning to compose at GCSE will help students to understand musical structures and techniques.'

'It's essential, as you only understand how music works through composing.'

But many comment that it is difficult to reconcile workshop-style lessons where success is measured in the quality of learning with the need to produce hard evidence of individual students' work to submit to the examination boards. Many teachers promote group work, exploration and sharing in classroom composing projects at the start of Year 10,³ but this approach always has to give way to the serious business of producing the fully edited, notated⁴ and recorded pieces the examination board requires.

A test of composing or composition?

GCSE students start the course with nine years of study of the way musical elements are combined in musical structures, and some experience of manipulating elements for themselves (DFE 1995 & QCA 1999). However, at GCSE 'composing' becomes 'composi-

tion' as students are assessed on the pieces they produce. Despite the fact the paper is still called composing, it is the product that is being tested, not the process. This shift is significant. Teachers move from fostering and enhancing the universal play impulse in music as Swanwick (1988: 41ff.) describes to developing specialised skills and artistic thinking in each individual. The development of specialised skills in each student is essential to becoming a successful composer. As discussed below, without development of the various skills associated with different aspects of the composing process, the student will fail to make progress and may stop making progress all together.

The examination boards assert that students may compose music in any style, but all genres must be presented as a work-object, whether or not the student has conceived it as such. Successful examination pieces must demonstrate a clear authorial intention and independent artistic thinking, as well as a general ability to use a repertoire of compositional devices in generating, realising and editing work and the aural perception to evaluate and criticise the music in draft and final versions. During the composing process, students sketch and develop ideas and create several draft versions before determining the final version. Considerable cognitive skill and artistic self-knowledge is required of GCSE students to create such musical constructions. By the end of Year 11 we can no longer be 'working towards the expectation:' we have to arrive (DFE 1995).⁵

Authorial intention in problem-solving

Paul Hindemith described the making of a musical structure as like 'raising a ladder without the support of a wall'.⁶ Once complete the musical structure coheres according to its own logic, but one never quite knows what will be a cornerstone or a supporting wall until the piece is done.

'Composing is all about making choices, even at the most basic level.'

Students determine exactly where and how the musical bricks are laid by problem-solving. Most students of this age are able to hypothesise solutions to new problems based on earlier experience once they have been shown how to apply their own knowledge (Hargreaves & Zimmerman 1992). Lerdahl (1988) describes this as a composing grammar invented by the composer as the piece is created, mainly by listening to extracts of the work in progress and comparing them to the desired goal. An emerging authorial intention and creative imagination govern choices. Students must choose their own musical bricks and determine how to put them together otherwise they will not make any progress towards independent artistic thinking. The GCSE syllabus' declaration that students must describe their chosen brief identifies the importance of authorial intention in making a successful, coherent composition:

The marks to be awarded for composing will be equally divided between the two objectives for composing:

- creating and developing musical ideas by composing music
- using musical elements and resources appropriately by producing completed compositions within a given or chosen brief. (SEG 1999: 25)

The nature of the composing problem changes as the piece takes shape, a fact that requires the teacher to be more inventive than employing straightforward instructional solutions.

Teaching composing requires not only practice of technical devices but also building up a store of tonal and structural knowledge. Students must be taught how to problem-solve, as well as what effective solutions to composing problems might be. The composing process is always dynamic: students need to learn to think in sound to understand how smaller changes affect the whole piece and how the piece takes on its own character as it starts to form. There is never one answer to a composing problem as Sloboda describes:

In ill-defined problem solving situations such as musical composition, where the composer is at liberty to change the nature of the problem as he proceeds, algorithms (foolproof solution generators) are of limited value, even if discoverable. Because heuristics are not perfect, there has to be a process of verification whereby trial solutions are tested against criteria for success. (Sloboda 1985: 115ff.)

Students' developing ability to judge the effectiveness of their work is crucial to their success as composers. Case studies of classroom composing in real-time by Bunting (1987); Carter (1988); Colley, Banton, Down & Pither (1992); Davidson & Welsh (1988); Davies (1992); Loane (1984); Sloboda (1985); Swanwick (1988, 1991); Swanwick & Tillman (1986); Tillman (1987); Whitaker (1996); and Younker & Smith (1996) indicate the central importance of the student's critical self-awareness as summarised here:

- (1) generating and identifying ideas;
- (2) manipulating the ideas according to chosen compositional techniques;
- (3) modifying existing ideas and creating new ones in juxtaposition according to the students' judgement of the developing structure of the music; and
- (4) determining the final version of the piece, evaluating and editing the work as a whole.

This model applies to GCSE students whether composing in a single session or working over a period of weeks. However, students move through this process at different rates. They vary in their ability to problem solve and in the number of composing solutions that they can apply to their work; what Sloboda calls the 'general tonal and stylistic knowledge' stored in the long-term memory and their 'repertoire of compositional devices' applied consciously to composing tasks (Sloboda 1985: 118ff.). Students also require very different amounts of guidance and support at different stages: weaker students find stages 2, 3 and 4 increasingly more difficult to manage for themselves and rely heavily on the teacher's support and guidance. In extreme cases, the weakest students cannot manage these final stages independently.

Observation of students as they compose in lessons shows that the most successful students test their ideas against their original hypotheses constantly as they compose, and will change the hypothesis as the piece starts to form into an early draft. They appear to be able to identify a common thread to the problem-solving, and although they will stop and muse over smaller problems within the composing process, and may need bringing back to the main task in hand they do not lose sight of the overall goal. They are able to decide whether or not to follow the original idea, or to abandon ideas as being uninteresting, or too hard or for taking too long.

Less successful students test ideas less frequently and are more resistant to changing their original hypothesis, not understanding that this is part of the process. These students will often get stuck in a compositional backwater: for example working industriously to

convert block harmony into an accompaniment figure without realising that the harmony is inconsistent or weak. These students do not understand the need to change work they think is completed and often become frustrated when directed to do so. A student's comment – 'Well I thought I'd done it, but she [the teacher] said I had to change it all, and now it's going to take ages' – is a typical response of a less skilled composer.

It is worth noting that even the most proficient and knowledgeable GCSE composers are still novices, and like other novice composers described by Colley, Banton, Down & Pither (1992), Davidson & Welsh (1988), Hargreaves (1986), Serafine (1980), and Zimmerman (1993), GCSE students start by working mechanistically and rhapsodically, feeling their way towards solutions by exploration and trial and error. Many students continue to generate ideas in a similar exploratory fashion throughout the course. Classroom observation indicates that both serendipity and careful working out of ideas are profitable routes to generating material.

'Some students just can't compose'

GCSE groups of mixed ability are the norm in schools, not the exception, and every teacher of composing is obliged to differentiate their teaching to suit the needs of the students. Differentiation is the art of tailoring work to suit students of different abilities, ages and learning styles, by using different equipment, resources and teaching styles. Students observed in the schools represent the full range of marks available for composing. (A* @85% – G @10%). The demographics of the school affect the median grade achieved, but in every GCSE class observed to date there is a spread of at least five grades within each group. The teacher is dealing with students who have significant differences in their composing ability. They comment:

'Being realistic about what can be achieved in two years, there is a limit to what [the students] can do.'

'Not all students can compose, composing should be an option.'

'All students have the potential to be creative with music.'

'Strong performers find compositions very hard, they do too much plagiarism. Non-skilled performers are more inventive. Skilled performers are too critical of themselves as well, just because it doesn't sound like Mozart.'

'You can teach [composing] as the results prove, but . . . not with everyone.'

Because composing is such a complex set of procedures, requiring such a depth of musical understanding and the technical know-how to produce what is desired, as well as the artistic confidence to explore new, challenging and unknown areas of one's own psyche, it is no surprise that GCSE students vary in their ability and motivation to compose. Fischer (1986) points out that in multi-skilled operations like composing, only those skills practised most consistently will become most developed. As Fischer points out 'unevenness in development is the rule not the exception' (1986: 480). Teaching composing requires equal development of the motor and cognitive skills associated with the different stages of the process.

Figure 1 presents a summary of this relationship and summarises the connection between the three activities and associated skills in the composing process. Learning to

compose is iterative. Learning the activities and associated skills in each stage of the process will enhance learning in the other stages. No part of the process should be learnt in isolation, or general progress in learning to compose is thwarted.

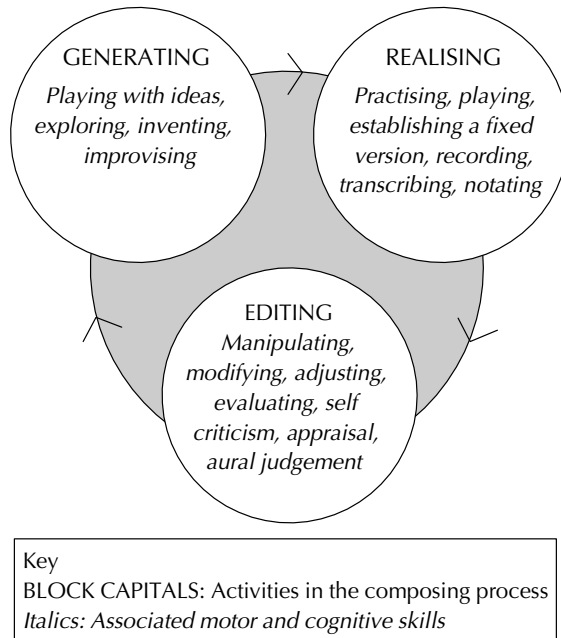


Fig. 1 Activities and associated skills in the composing process

However, progress towards greater competence is a rocky road. GCSE students move between childhood and adult cognitive modes and artistic expression, and errors of perception or technical mistakes are the result of an imbalance between a shift towards reflective thinking in early teenage years and the ability to use technical knowledge in composing (Davidson & Scripp 1988). Zimmerman (1993) comments that the teenage student's perception of the music they wish to create often outstrips their ability to manipulate musical materials adequately: 'the young performer's self-criticism can exceed her competence in technical and expressive execution' (1993: 6).

The complexities of using compositional techniques or the difficulties of 'getting it right' – whatever 'right' may be – can be frustrating for students. However, students may also be resistant to challenge and new ideas, a factor which prevents progress. Notably each class observed had at least one proficient performer who continually re-created the same musical styles reusing familiar techniques and devices. Although able improvisers, and often with a higher than average level of notational skills and theoretical knowledge, these students rejected unfamiliar or complex composing techniques as too hard, or too dull, preferring to keep to more familiar styles they knew they could create. Over a period of time these students may be overtaken by others in the group, who challenge themselves to deal with harder concepts. It is not just the less able composers who fail to make progress.

Why are some students better than others?

The GCSE student operates in both adult and childish cognitive worlds. Understanding, identifying and predicting how independence emerges whilst the student is still relying on teacherly instruction and guidance is the key to effective teaching.

A review of research into the development of musical perception through childhood is discussed in Hargreaves (1986), Hargreaves & Zimmerman (1992), Serafine (1980, 1983, 1988), and Zimmerman (1993). However, few writers focus on the work of students of this age, and fewer have examined how GCSE students develop the specialist technical abilities and artistic independence to make their own compositions. Theoretical models of the development of musical perception appear to infer that all students progress along the same continuum and that all students will operate in the meta-cognitive mode by this age, with the ability to hypothesise and work autonomously.

Swanwick & Tillman (1986) describe older GCSE students (15+) as operating in symbolic and systematic cognitive modes, where:

New musical universes are rolled back and this creation, not just of music but of musical systems, can be observed either in new generative musical procedures – we may think of Schoenberg and serial technique – or of talking and writing about music in a way that borders on the philosophical – and here we might think of Hindemith, Tippett, Cage, Copland and such personal documents as the letters of Beethoven. Not only is the value of music strongly felt and declared; the field of music is expanded by new processes or perspectives and these are offered to other minds. (Swanwick & Tillman 1986: 331)

This extensive case study comprises mainly compositions from children aged 3–11, with some examples from higher age groups.⁷ Swanwick and Tillman conjecture that 14–16-year-old students might conceptualise the composing process in the same way as adult professional composers. Whilst this is a good general description of how GCSE students conceive the composing process, not all are capable of this level of higher order thinking and artistic integrity. Classroom observation indicates that some students never achieve autonomy as composers, and rely on the teachers' direct support at all stages of the process. A significant minority of students observed appear to come to the end of their development as composers during the GCSE course. This is not an aberration but reality and should be put at the heart of any developmental model.

What determines a student's composing ability is the extent to which the motor and cognitive skills associated with each part of the composing process (Fig. 1) are developed consciously and explicitly, and the student's conceptualisation of how each phase of the composing process links together. It is imperative that the student understands that when they are engaged in one activity, such as generating new ideas, the material they choose to experiment with is dependent on how they plan to realise and edit their ideas. Students of this age are unlikely to be able to express this in words, but it becomes explicit in the way they work. Equally important is that the skills associated with each phase of the composing process are developed in equilibrium. Classroom observation indicates repeatedly that lack of progress stems from uneven development of skills, because the skills associated with each activity develop unevenly if they are left undisturbed.

Teaching cognition and understanding differentiation

Swanwick and Tillman (1986) also do not comment on the fundamental importance of the teacher in the students' learning. Students need to be taught to make compositions, and any description of how students develop composing skills, must place the teacher at the centre of the process.

Vygotsky describes the difference between students' actual developmental level of cognition and their level of potential development as the 'zone of proximal development' (1978: 84ff.). He points out that with a teacher's guidance 'children can imitate a variety of actions that go well beyond the limits of their capabilities' (p. 88). Teachers directly influence the rate students realise their potential as composers by using different approaches to composing, and enabling student to use different learning tools.

Teachers understand each student operates in their own zone of proximal development:

'The teacher starts by doing 99% of the task and giving the student the last 1% to complete. Gradually you give them more and more to do themselves. Some students will always need you to do the 99%, it's a fact of life. But others will go on to do more for themselves, and once they get going they improve in leaps and bounds.'

Helping students to overcome difficulties and leading them towards making fruitful decisions is the daily business of teaching composing. At key stages in the process the teacher summarises work completed and analyses the process for the student, suggesting possible ways of continuing. The student assimilates this information and gradually takes control of determining where ideas should go. At a crucial point the student takes over from the teacher as composer, and from that point the student gains autonomy. Paynter describes this process:

When anyone has tried putting sounds together and is pleased with the results, enough to remember them, the teacher can start to teach – mainly by asking questions about what is presented. (Paynter 2000: 8)

In a recent observation, Year 10 students were arranging Michael Nyman's *First Waltz in D* using a computer sequencing package. The first task was to input the music, choosing from various melodic fragments, which increased in rhythmic and tonal complexity. Once all groups had created an opening passage, students presented work to the class. The teacher led a discussion asking students to comment on the effect they had created, and they discussed the effects created by using ideas that were similar and contrasting. The teacher established that the most successful pieces created specific effects through careful selection and combination of particular sounds.

Students returned to inputting melodic ideas, and, following further suggestions from the teacher working with individuals, began to move the ideas around on the screen, using the display as a graphic score to judge the structural relationships between elements. The teacher encouraged students to judge the timbral effects they were creating and to consider the balance between individual parts.

In another group discussion the teacher directed students to consider the piece as a musical structure. There was a significant change in perspective; previously students were

thinking of the piece as a linear progression of ideas, now they were able to comment on the potential formats of their pieces. The group discussed making an introduction, how to create different sections through combinations of the given material and original ideas. Some students had started to create these sections already and some had changed the waltz rhythm moving further away from the original model. The teacher directed students to consider the overall shape and mood of their pieces by drawing their attention to the different timbral effects and tempi various groups were already using.

From this point some students began to race away, because they realised what the possible final version of the piece would be. Some are creating floating ethereal waltzes, others faster, demonic fairground waltzes, spinning through the music with alarming intent. One group has decided that the waltz would start 'all smooth and light' and then disintegrate through the gradual introduction of harsher, heavier sounds, ultimately grinding to a halt. Another group is creating a mechanical waltz, by adding percussion parts, which take over completely in one section, the shape and rhythm of the original melodic fragments being hinted at in the juxtaposition of sounds.

How do you teach composing at GCSE?

Just as composing is more than manipulating compositional technique, so teaching composing is more than delivering compositional technique. The teacher directs and guides students towards successful goals, enabling them to decide for themselves what works most effectively in the particular musical situation. The teacher structures the student's learning, converting the multi-skilled composing process into a series of manageable steps. Salaman comments on the importance of directing students towards musical decision making when composing in order to focus the classroom activities towards the chosen goals. (Salaman 1983: 70–1)

The teacher giveth and the student taketh away (hopefully)

One teacher described the 'cultural rucksack' in which each student carries their knowledge and experience of music. The way the teacher feeds skills, knowledge and understanding into the rucksack materially affects the value the student places on these new experiences, and their subsequent motivation and ability to 'get everything back out the bag and shuffle it about'. All teachers commented that these skills are taught throughout key stage 3, and School 9 (Fig. 2) aims to have taught students how to compose before GCSE starts.

The medium that the student uses to generate and record ideas influences both the areas of composing skill most developed, and the rate at which they are developed. Each medium has its own set of skills, which require time and practice to master. Figure 2 tabulates the mediums used by the eleven schools represented. Resources, budget and equipment available to schools varies enormously. Schools 2, 3 and 8 have only one music classroom and one practice room, making keyboards with headphones the only viable medium for independent work. Schools 1, 4 and 10 have only 2 MIDI stations to use with classes of up to 20 students. In these schools the teacher is obliged to teach music technology out of lesson time. Schools 5 and 9 have a dedicated music technology suite,

	SCHOOLS										
	1	2	3	4	5	6	7	8	9	10	11
Methods for realising ideas	37 SF, SF	18 F, SF	20 SF	10 SF	18 F	30 SF, SF	14 F	30 SF	55 C	13 C	5 F
notation compulsory		✓			✓		✓				✓
notation optional	✓		✓	✓		✓		✓		✓	
notation not taught									✓		
own instruments/classroom instruments		✓		✓	✓	✓			✓	✓	
keyboards used by default	✓		✓					✓			✓
MIDI keyboards							✓		✓		✓
multitrack recorder			✓						✓	✓	
sequencing package	✓			✓					✓	✓	✓
score writing package							✓				✓
draft performances recorded on tape					✓						
no technology used (see notes below)		1			2	3		1			

Numbers in italics indicate mean number of students taking GCSE per year.

F: formal, SF: semi-formal, C: creative schemes of work. Two references indicate two teachers observed.

1 No music technology equipment

2 Technology not allowed for composing

3 Music technology equipment teacher operated only.

Fig. 2 *Tools for realising and editing compositions*

and Schools 7 and 9 use a score writing and sequencing software networked on the school intranet.

What do we teach when we teach composing at GCSE?

Many teachers feel challenged when teaching GCSE composing, especially those who regard themselves more as specialist performers than composers, or those who did not study composition at university or music college. Apart from a handful of in-service training courses, the vast majority of teachers have not studied teaching composing in either undergraduate or teacher training courses and comment that they were obliged to work it out for themselves. Figure 2 indicates the approaches teachers take to teaching composing.

Formal approaches to GCSE composition stress the theoretical basis of making a

composition, and are heavily reliant on tonal models and notation. In a teacher's own words:

'Three essential skills of composing: (1) musical imagination, (2) writing it out, and (3) setting it out on paper and developing ideas from there.'

These students work through a series of exercises in pastiche Classical and early Romantic styles, firmly rooted in four-part harmony, using regular phrase structures and cadential points. Notation is compulsory, whether with pen and paper or a computer score-writing package.

Experimenting with the familiar and establishing an ownership of particular styles is a necessary part of the development towards an individual voice. More than one teacher argued that students must learn the foundations of tonal music at GCSE to provide the basis for all subsequent musical experience and learning. Teachers 5 and 11 commented that students needed a certain level of theory training to be able to compose at GCSE, and they felt justified in insisting that students work in staff notation. Like Rainbow (1994) they felt that teaching staff notation was a means to an end, ultimately enabling students to write more complex and developed ensemble scores than would be possible relying on aural memory and tape alone.

Peter Maxwell Davies made no apology for using chords I, IV and V with school students:

It would be useless to deny the basic chord patterns at the very roots of our musical experience, which form the basis of so much of our musical communication. If, in order to create a freedom from tradition as certain elements would have it, we deprive our pupils of the common denominator of experience and communication, they have no common ground from which to start out, reassured, towards a natural individuation. (Maxwell Davies 1963: 110)

These formal composing teachers regard full literacy in traditional staff notation as a prerequisite for compositional skill. However in these schools at least 90 per cent of GCSE students had private instrumental lessons for some years before taking GCSE.⁸ Schools 5, 7 and 11 stipulate only those having instrumental lessons can opt for GCSE music.

The semi-formal approach also focuses on re-creating given models, but these teachers are more flexible about teaching students notation, and use a wider range of styles for pastiche models. Several of these teachers commented that pop and jazz models appeal to 'weaker' students and provide access to students who do not play orchestral instruments. Green identified the same attitude towards pop music as an easy option in her survey of music teachers' opinions of curriculum design (Green 1988: 57–64). These teachers' concept of value is clearly expressed in their choice of music for different abilities. Notation-based training built on tonal compositional technique is still regarded as the most worthy form of teaching composition. There is also a direct link between instrumental performance and compositional ability. Those who can play well will compose well.

Most semi-formal composing teachers taught in schools where pre-trained instrumentalists were in the minority in the GCSE class and general literacy levels were lower. They encouraged students to develop general musical literacy in composing through the use of graphic score and draft notation to plan and record work, but these teachers did not insist

that all students must learn to read and write a complex notation system to the same degree. Some teachers agree with Salaman who asked, 'what *musical* purpose staff notation serves in the life of average pupils?' (1997: 148) and Wishart (1977) who describes staff notation as 'the visual servant of an aural phenomenon' no longer significant in youth subcultures or many world musics, taught purely to conform to needs of university study.

Reading and writing musical notation is a key skill in composing. Classroom observation indicates that only students who learn to draft their work and reuse these drafts in the subsequent stages of the composition create longer and more developed work, and work which uses the timbral and textural effects of the music to its fullest extent. Nicola LeFanu comments that teaching notation as a composing tool does not stifle creativity as:

nothing can substitute for an understanding of 'how music works' and the ability to push notes around in more than one idiom. (What's stifling is bad theory teaching – thinking about harmony without understanding it's linked intrinsically to metre/rhythm; learning theory without aural experience etc.)⁹

Bill Connor felt that notation was an essential tool for communication in composing, and points out that teaching notation is just a means to an end:

Music is a sound art – the graphic should communicate the musical ideas to others. The way you manipulate the graphic, how much of the sound you get on the page indicates the extent of your compositional technique, and this is what you should concentrate on when teaching composing, namely the communication of ideas. The teacher should try to get as much of the sound into graphic, trying to preserve as much of the inner ear as possible by communicating the ideas, creating the ideas and editing and selecting the ideas critically. Manipulation of the tools of graphic representation (tape, pen, paper, keyboard) is necessary and should be as exact as possible. However the tools should not define the composer's work.¹⁰

Both formal and semi-formal composing teachers often speak in a more complex notation-based language than students understand when evaluating compositions written as staff notation. Students are often alerted to 'errors' made in use of harmonic progressions, which are not errors of perception, but simply errors in writing, such as writing in the bass clef as if it were in the treble clef. Dealing with these 'mistakes' takes up much time in lessons, and often demoralises the student, as they feel themselves to be incapable of producing what they want. In extreme cases this can lead to a learned helplessness, where the student relies entirely on a teacher or more competent friend to realise and perform their compositions for them. These students fail to develop ownership of their work and do not develop an authorial intention.

It is significant that the two teachers who design schemes of work to teach students to think creatively are composers themselves. They put the craft of making compositions at the centre of the composing curriculum. Both stress the importance of learning techniques for generating and realising pieces, and impose considerable rigour on the students' work but emphasise the importance of thinking like a composer and learning to become an independent composer.

The formal and semi-formal models require students to imitate given models more commonly derived from the theory of composing than real pieces. Unless particularly advanced in theory and instrumental training these students rely far more heavily on the teacher as editor in chief, as there are so many applications of composing theory that can

be adjudged wrong. The creative composing teachers produce far more independent thinking from their students, even students of a generally lower academic ability. Models are used to spark off new ideas, students are encouraged to work like the composers, not to imitate the outcome. These students start to understand how to 're-invent the grammar' (Paynter 1992: 97–114) even if they cannot work autonomously. Notably, these teachers used a wider variety of musical styles as inspiration to composing projects, and students operate with ease in both tonal and non-tonal structures. Comparing the two approaches it is clear the more creative approach works far better. However they are outnumbered fourteen to two by those who teach composing as a series of models to be copied, and a casual comparison of this group of teachers with the teaching profession at large suggests the same is happening across the country.

Teaching composing through performing

Performing is a natural way for students to express their compositional ideas, and all teachers encouraged students to explore ideas through improvisation and extemporisation on instruments and with voices. Some teachers regard performing as the essential musical experience of GCSE music and the most immediate way of getting students to understand how composing works 'out loud'.

'Composing should be taught through extemporisation and by differentiating performing activities. GCSE students only understand compositional techniques by playing them.'

Teachers experienced with dealing with non-specialist performers at GCSE pointed out the advantages of encouraging ownership of compositions through performance from the very early stages. Building a student's confidence in their own performing ability boosts their self-regard as composers. Some argue this is the only way for beginner instrumentalists to get to know how music works:

'These students are held back by the limitations of their performing skills. I start all students on peripatetic tuition when starting GCSE, and use simple [composing and improvising] tasks to build on these skills.'

However, students may be restricted in the scope of their artistic expression if they are never given the wherewithal to go beyond their performing skills. A teacher who had been a GCSE examiner wryly commented:

'When I was a moderator¹¹ we had three types of composition that came up over and over again. The first was "nice girl with flute playing piece with triads" where she'd written a tune for herself to play and then the teacher had said: "now add some chords", and because they'd done primary triads in root position, all the chords were primary triads in root position. The second was "nice girl with flute playing piano piece" which was pretty much the same as the first, and you could clearly see that she'd only written what she could play herself, no one had sat down and showed her what you could really play on a piano. And the third one was "nice girl with flute plays on the keyboard". This one was usually called "A walk on the moon" and was again pretty much the same piece, still with primary triads in root position, but using wacky noises on the keyboard with the occasional pitch bend to illustrate Martians or whatever the teacher had told her to put into the commentary.'

The dominance of keyboard harmony in formal and semi-formal teaching is striking, even when students were trained on other instruments to a far greater level. One teacher asked me to report on student X who was 'struggling'. Observation revealed that far from struggling, X was a proficient rock guitarist with an impressive portfolio of pieces on tape, created on multi-track recorder and live performances with friends, as well as many draft pieces and improvisations. The pieces were well developed and imaginative, albeit in the same heavy rock style and featuring many solos by X. The problem was that X did not fully understand the 'keyboard-harmony speak' that the teacher used, and had become bored with trying to cope with voice leading and cadences in written exercises. 'You don't have chord I on a guitar', X remarked acerbically, 'I don't think of keys, I work in scales'.

Do computers make it easier? Teaching composing through music technology

It is the capacity of sequencing and score-writing computer packages to record and realise students' work which divides teachers' opinions on its value as a learning tool for composing. Opponents to music technology in the classroom argue that is a tool to bolster up weaker students:

'We don't really need computers here, all our students can write it down.'

Students can edit both sound and notation, working in a macro and micro edit depending on whether they work with blocks and sections of the piece, or individual notes and smaller musical gestures. Changes are recorded and reproduced instantly. A MIDI keyboard or computer sound card enables students to access sounds of the adult professional music world, particularly synthesised sounds from pop, rock and dance music. Students can make ensemble pieces without the need to convene an ensemble rehearsal or have the ability to play several parts at once.

Technology is the teacher's friend:

'If students are unable to internalise more than one part, they can use the sequencer or multi-track to create an ensemble.'

Computer software makes GCSE a truly comprehensive examination. Provided the school has appropriate equipment, all students have an equal opportunity to compose:

'Technology means you don't have to be a performer to compose.'

Music technology facilitates learning in students who have not had extensive pre-training in notation or instrumental skills:

'It's all about enabling the kids. This package is such a resource it would be wrong to deny them the opportunity to use it.'

Many teachers dislike the synthesised sounds computer sound cards produce, and argue for acoustic instruments. Others argue that students do not learn 'real' musicianship by manipulating events on screen. Students should operate musical materials for themselves, working it out on an instrument like 'real' composers do:

'Composing on music technology is music technology not composing. The students never get beyond the limits of the programme.'¹²

Of course many professional composers compose with the help of music technology, as the increasing number of illustrious names that endorse current packages indicate.

Composing computer packages are bringing fundamental changes to the sociology of the classroom. Many teachers are challenged to teach a medium that they did not learn as students. Music technology challenges the central position of musical writing that has so long been the foundation of compositional study (Shepherd, Virden, Vuilliamy & Wishart 1977; Wishart 1985). Computer composing packages enhance students' ability to realise their ideas. They can operate like a competent adult far more readily than by working in the traditional skills of notation and performing as the learning curve is faster, and some students overtake their teacher's ability to use the programme. Teacher and student work as fellow musicians. Both have access to the same range of sounds and the same means of manipulating them. It is a serious challenge to the literacy-based master-apprentice relationship assumed in formal and semi-formal approaches to teaching.

Teaching composing is both a transfer of skills and a process of guiding students towards independence and critical self-awareness. What the teacher puts into the student's 'cultural rucksack' and the way they encourage students to use this knowledge and experience is the major influence on the way the student learns. Just as the medium the student works in affects their progress, so the rules and conventions each teacher imposes will influence the student's approach to composing, and their appraisal of their own ability.

Is GCSE coursework a good test of composing ability?

It is notable that the two creative composing teachers felt themselves justified in interpreting the GCSE syllabus to allow for a creative approach they wanted to follow. Other teachers, possibly through a lack of confidence in themselves as teachers of composing or under pressure to produce results, feel obliged to encourage particular musical styles and formats. These teachers appear to be letting the tail wag the dog. Having derived from the assessment criteria what makes a 'good' composition, they teach what they know: keyboard harmony and compositional technique in a scheme of work, which drives all students towards getting the highest mark. At best this approach is dull, at worst hostile:

'I don't like forcing students into compositions, it can force conflict with weaker composers, even if they're good at other areas of music. Also I don't like the way that the need to produce coursework forces me to over support weaker students, I am carrying laziness.'

A major contributory factor to this unsatisfactory situation is that the GCSE syllabus contains no specific curriculum for composing, and no particular instruction for how composition should be taught: 'Composing can include improvisation and arranging and can use traditional and/or contemporary idioms' (SEG 1999: 25). A non-prescriptive syllabus is in some ways a good thing, but without a clear conceptual framework for how students of different ability learn to compose, and a clear understanding of how the teacher

will influence each student's learning, teachers have to decide what to teach for themselves. As more than one teacher pointed out, how well students are taught 'depends on the teacher, the teacher makes the course'.

Many teachers rely on the familiar pastiche of theory-based training. GCSE composing is based on the concept of the work-object, derived from the nineteenth-century ideal of *werktreue*: 'a self-sufficiently formed unity, expressive in its synthesised form and content of a genius's idea' (Goehr 1992: 242 quoting E. T. A. Hoffman). Students create pieces, which are assessed on the evidence of their theoretical content, and often in terms of what an expert composer did with the same elements or using the same compositional techniques. Non-notated and improvisatory styles of music are side-lined, even if students can create imaginative and meaningful art works in this way. As Green points out:

It is one of the shortcomings of this system that informally acquired, non-discursive, pre-literate knowledge can reach the highest levels of compositional musicianship, and yet cannot be adequately rewarded. (Green 1990: 195)

Value judgements in assessing compositions

Compositions can be assessed. Any form of critical listening evaluates and judges the musical art work. Student composers can make compositions, and these must be included in the GCSE assessment if the examination is to be a real test of musical ability. The question is how to do it.

Many teachers protest that GCSE composing assessment criteria are confused: either too vague to allow for specific application or too specific to apply to all students' work. Teachers complain that the assessment criteria are not relevant to very able or very weak students. However, few teachers are prepared to offer an alternative approach. Ross (1989) identified the same phenomenon, commenting that music teachers often contradict themselves by complaining that it is difficult to put a numerical value on art and then doing it. He quotes a teacher:

They also say, 'How do we assess composition . . .?' I mean they'll go to a concert and make judgements about what they can hear quite happily . . . they come back and moan, 'We can't judge composition. How do we know what criteria to use?' (Ross 1989: 302)

Pilsbury and Alston (1996) argue that the scope of current assessment criteria is too wide, and in attempting to 'apply such a finely graded system . . . the reality of the composition may well be lost' (1996: 249). They suggest replacing current criteria, which focus on the manipulation of musical elements within the musical structure with criteria which define what a composition is and judge the students' work against this model. However, this approach would replace one unsatisfactory system with another. GCSE compositions are the product of a physical, aesthetic process of creating an art work and must be regarded as such (Murphy & Broadfoot 1995: 46ff.). If we admire adult musical works for their interest and challenge then surely a young adult's work should be judged similarly. Even if students experiment in a sound world totally familiar to a musically literate adult throughout the course, assessment of GCSE compositions should reflect the way the students have conceptualised the process and the level of independence they exhibit in creating the piece; and not compare their work to

standardised models derived from a theoretical abstraction of compositional technique. Spencer (1988) points out:

Where composing is concerned a single piece of work may seem incomplete or unprepossessing if judged simply as an end product, but it may have a story to tell about how a pupil has developed through undertaking the task and its relationship to other [musical] tasks. (Spencer 1988: 64)

Composers are clear that students undergo an apprenticeship as they learn to compose, but that they should be given the opportunity to create music like adults do, and given the same credit for their work as adult composers. Bill Connor feels that assessment should focus on 'how students use the materials' but avoid imposing notions of standardised pieces:

We should not put up artificial qualitative barriers, complaining that it does not sound like examples of the master composers. It won't sound like this, and it should not be expected to.

Nicola LeFanu states:

I think assessment has to take into account not only the coherence of the piece in its own terms, but the extent to which the students has been energetic in challenging (and disciplining) themselves: trying out new ways of doing things rather than merely reproducing their favourite piece of Rachmaninov or McCartney or whatever. (If they are only confident in pastiche, let it at least be varied – Bartók as well as Bach and Blues; then at least they are learning worthwhile things about how music is made).

Conclusions: Why is teaching composing so challenging?

Put simply, teaching composing is challenging because composing is challenging. It requires the teacher to have some proficiency as a composer, and to understand both their own and the student's learning process. It requires the teacher to manage a complex multi-stage learning process over two years, within the confines of the school timetable.

This research indicates that all students have the potential to be creative and can take responsibility for some part of the composing process. However, one always teaches a mixed-ability class because students vary in their intuitive compositional ability; in the rate at which they develop the skills associated with each aspect of the composing process (Fig.1); and the extent to which they understand the interrelation of generating, realising and editing musical ideas into a coherent structure. Much of current research into how students compose in real-time and how students develop composing skills does not appear to understand the dynamism of the learning process. Notably much research avoids mention of the fundamental importance of the relationship between student and teacher.

Effective teaching of composing delivers the thinking and practical skills students need to generate, realise and edit their compositions, in a manner that approaches the way a professional composer works. The teacher shows students how the carpet looks from the underside, and facilitates the students in weaving their own. Some students will always require more support in doing this, and may never be able to work fully independently. Learning the tools of trade requires practice; as Hindemith points out: 'Creative talent builds on rigorous training' (1952: 178). The business of teaching composing is to facilitate

the development of compositional know-how, in a manner that develops know-that and most importantly, know-why.

However, the medium in which students work will materially affect the quality of their learning. Teachers constantly battle with constraints of budget, equipment and accommodation. Teachers must provide the means to ensure that students will not be limited in their development as composers by a lack of notational or performing ability.

When considering the place of composing in the music GCSE, we must be realistic about what 16-year-old students will produce. Even the most able GCSE student composers do not compose in the same way as fully competent adults. Some GCSE compositions will be inconsistent and incomplete expressions, as is characteristic of this age group. However, learning to compose opens a door through which students can enter music, and with effective teaching they should manage to take a few steps along the road unaided. Not all will get as far as we might wish. Some will go their own way, some will give up trying, but they will all benefit from the experience.

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Notes

- 1 Of the eleven schools, four are single sex (two boys' schools and two girls' schools) and seven are mixed. There are eight comprehensives, two schools that select by religion and one selecting by ability. The demographic profiles of the schools vary considerably.
- 2 Unreferenced quotes are the teachers' own words.
- 3 For overseas readers: GCSE subjects are studied in Years 10 and 11 of secondary schooling when students are aged 14–16.
- 4 All examination boards require a taped performance of the piece and a score. If the piece cannot be easily represented in score format, then the student must submit a written analysis of the construction of the piece.
- 5 DFE 1995. End of Key Stage statements of attainment for assessing students in Years 3, 6 and 9 describe a student as working towards, at, or beyond the expectation for that Key Stage. From September 2000 students work is assessed against levels in line with other subjects (QCA 1999).
- 6 Radio 3 Composer of the Week Broadcast.
- 7 'It has not been our main concern to collect compositions from children above the age of 11 or 12, but we do have some examples from the 14- to 15-year-old age-group' (Swanwick & Tillman 1986: 328).
- 8 'Instrumental' refers to both instrumental and vocal lessons.
- 9 Letter from Nicola LeFanu.
- 10 From a conversation with Bill Connor, PRS composer in residence with the Hallé Orchestra. Not a verbatim record.
- 11 GCSE composition portfolios are marked by the class teacher, and then a sample is second-marked by

a moderator appointed by the examination board. Moderators are required to have at least five years classroom experience. Moderators may adjust marks if appropriate.

- 12 Not all teachers who oppose using computer packages to aid composing are technophobes, although many feel threatened by the need to become expert in an unfamiliar idiom. The final comment was made by a Head of Music with a thriving A-level music technology group who had a dedicated music technology suite, and taught music technology to the GCSE group, but insisted that compositions be created for live performance.

References

- BUNTING, R. (1987) 'Composing music: case studies in the teaching and learning process', *British Journal of Music Education*, **4**, 1, 269–310; & **5**, 3, 25–52.
- CARTER, D. (1988) 'How Children Compose.' Unpublished MA Dissertation, University of London Institute of Education.
- COLLEY, A., BANTON, L., DOWN, J., & PITHER, A. (1992) 'An expert-novice comparison in musical composition', *Psychology of Music*, **20**, 124–34.
- DAVIDSON, L., & SCRIPP, L. (1988) 'Young children's musical representations: windows on musical cognition.' In: J. Sloboda (Ed), *Generative Processes in Music*, 195–230. Oxford: Clarendon Press.
- DAVIDSON, L., & WELSH, P. (1988) 'From collection to structure: the developmental path of tonal thinking.' In: J. Sloboda (Ed), *Generative Processes in Music*, 260–85. Oxford: Clarendon Press.
- DAVIES, C. (1992) 'Listen to my song: a study of songs invented by children aged 5–7 years', *British Journal of Music Education*, **9**, 19–48.
- DEPARTMENT FOR EDUCATION (1995) *Music in the National Curriculum*. London: HMSO.
- FISCHER, K. (1986) 'A theory of cognitive development: the control and construction of hierarchies of skills', *Psychological Review*, **87**, 6, 477–531.
- GOEHR, L. (1992) *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music*. Oxford: Clarendon Press.
- GREEN, L. (1988) *Music on Deaf Ears: Musical Meaning, Ideology and Education*. Manchester: Manchester University Press.
- GREEN, L. (1990) 'The assessment of composition: style and experience', *British Journal of Music Education*, **7**, 3, 191–6.
- HARGREAVES, D. J. (1986) *The Psychology of Music*. Cambridge: Cambridge University Press.
- HARGREAVES, D. J., & ZIMMERMAN, M. P. (1992) 'Developmental theories of music learning.' In: R. Colwell (Ed), *Handbook of Research in Music Teaching and Learning*, pp. 372–91. New York: Schirmer.
- HINDEMITH, P. (1952) *A Composer's World: Horizons and Limitations*. Cambridge Mass.: Harvard University Press.
- LERDAHL, F. (1988) 'Cognitive constraints on compositional systems.' In: J. Sloboda (Ed), *Generative Processes in Music*, 231–59. Oxford: Clarendon Press.
- LOANE, B. (1984) 'Thinking about children's compositions', *British Journal of Music Education*, **1**, 3, 205–31.
- MAXWELL DAVIES, P. (1963) 'Music composition by children.' In: W. Grant (Ed), *Music in Education*. Proceedings of the Fourteenth Symposium of the Colston Research Society, 108–24. London: Butterworths.
- MURPHY, R., & BROADFOOT, P. (1995) *Effective Assessment and the Improvement of Education – A Tribute to Desmond Nuttal*. London: Falmer Press.
- PAYNTER, J. (1992) *Sound and Structure*. Cambridge: Cambridge University Press.
- PAYNTER, J. (2000) 'Making progress with composing', *British Journal of Music Education*, **17**, 1, 5–31.

- PILSBURY, C., & ALSTON, P. (1996) 'Too fine a net to catch the fish? An investigation of the assessment of composition in GCSE music', *British Journal of Music Education*, **13**, 43–258.
- QUALIFICATIONS AND CURRICULUM AUTHORITY (1999) *Music in the National Curriculum*. London: QCA.
- RAINBOW, B. (1994) 'Theory versus practice: a mistaken antithesis', *International Journal of Music Education*, **24**, 31–6.
- ROSS, M. (Ed) (1989) *The Claims of Feeling: Readings in Aesthetic Education*. Lewes: The Falmer Press.
- SALAMAN, W. (1983) *Living School Music*. Cambridge: Cambridge University Press.
- SALAMAN, W. (1997) 'Keyboards in Schools', *British Journal of Music Education*, **14**, 2, 143–9.
- SELF, G. (1986) *Make a New Sound*. London: Universal Edition.
- SERAFINE, M. L. (1980) 'Piagetian research in music', *Bulletin of the Council for Research in Music Education*, **62**, 1–21.
- SERAFINE, M. L. (1983) 'Cognition in Music', *Cognition*, **14**, 119–83.
- SERAFINE, M. L. (1988) *Music as Cognition*. New York: Columbia University Press.
- SHEPHERD, J., VIRDEN, P., VULLIAMY, G., & WISHART T. (1977) *Whose Music? A Sociology of Musical Languages*. London: Latimer.
- SLOBODA, J. (1985) *The Musical Mind*. Oxford: Clarendon Press.
- SOUTHERN EXAMINING GROUP (1999) *GCSE Music Syllabus 2001*. Guildford: Southern Examining Group.
- SPENCER, P. (1988) *GCSE Coursework: Music. A Teacher's Guide to Organisation and Assessment*. London: Macmillan.
- SWANWICK, K. (1988) *Music, Mind, and Education*. London: Routledge.
- SWANWICK, K. (1991) 'Further development on the music development sequence', *Psychology*, **19**, 22–32.
- SWANWICK, K., & TILLMAN, J. (1986) 'The sequence of music development: a study of children's composition', *British Journal of Music Education*, **3**, 3, 305–39.
- TILLMAN, J. (1987) 'Towards a Model of the Development of Musical Creativity: A Study of the Composition of Children aged 3–11'. Unpublished Ph.D. Thesis, University of London Institute of Education.
- VYGOTSKY, L. S. (1978) *Mind in Society: The Development of Higher Psychological Processes*. Ed M. Cole, V. John-Steiner, S. Scribner, & E. Souberman. Cambridge Mass.: Harvard University Press.
- WHITAKER, N. (1996) 'A theoretical model of the musical problem solving and decision making of performers, arrangers, conductors and composers', *Bulletin of the Council for Research in Music Education*, **128**, 1–14.
- WISHART, T. (1977) *Sun 2 – A Creative Philosophy*. London: Universal Edition.
- WISHART, T. (1985) 'Beyond Notation', *British Journal of Music Education*, **2**, 311–26.
- WITKIN, R. W. (1974) *The Intelligence of Feeling*. London: Heinemann Educational.
- YOUNKER, B. A., & SMITH, W. H. (1996) 'Comparing and modelling musical thought processes of expert and novice composers', *Bulletin for the Council for Research in Music Education*, **128**, 25–37.
- ZIMMERMAN, M. P. (1993) 'An overview of developmental research in music', *Bulletin of the Council for Research in Music Education*, **116**, 1–21.