

Appendix 8

Appendix for Chapter Eight 15 year age group

Teacher No. 11

Teacher profile No. 11: a female music teacher in a public secondary school in Sydney, Australia - 15 year old age group																	
Identification																	
<p>Teacher: No. 11 – music teacher, public secondary school Gender: female Study age group: 15 years School location: Sydney, NSW Study project(s): Phase Shifting, Canon, Phase Shifting Melodies. Study timing: February – November 1990 Scores and transcriptions: Recording(s): none Scores and transcriptions: 11.1 – 11.3 Recording(s): CD 8 Track 1</p>																	
Education, preference, experience																	
<p>Qualifications: B.Mus; Dip. Ed.</p> <table border="0"> <tr> <td>Preferences (experience) –</td> <td>Preferences (experience) -</td> </tr> <tr> <td>Music Activities:</td> <td>Musical styles:</td> </tr> <tr> <td>Play an instrument</td> <td>I can tolerate pretty well anything</td> </tr> <tr> <td>Sing</td> <td></td> </tr> <tr> <td>Arrange music</td> <td></td> </tr> <tr> <td>Listen to music</td> <td></td> </tr> <tr> <td>Read books on music</td> <td></td> </tr> <tr> <td>Conduct</td> <td></td> </tr> </table> <p>Years of teaching experience: about 20 years Years of teaching in this school and ages taught: years 7 – 12 (12 to 18 years of age). Teaching in the school for two years. Years of experience teaching the age group of the study: about 20 years, 2 of these in this school. Experience teaching twentieth century art music styles: Schoenberg, Stravinsky, Stockhausen plus Bartok, Britten, Sculthorpe, Anne Boyd, Richard Meale, Ross Edwards, Cage, Bernstein etc. etc. – instruments, layers/structure, rhythm etc. in relation to elements of music. Tonal language influences. Experience teaching music of other cultures: Africa, Asia – influence on Western music, also instruments, layers/structure, rhythm etc. in relation to elements of music.</p>		Preferences (experience) –	Preferences (experience) -	Music Activities:	Musical styles:	Play an instrument	I can tolerate pretty well anything	Sing		Arrange music		Listen to music		Read books on music		Conduct	
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<p>Teaching environment</p> <p>School - School situation: Sydney, NSW Public or private: public How long has the school been open: 40 years Level: Year 10, Elective Music. Socio-economic background of parents: Working-class. Lower socio-economic bracket. General information about the school: School not academically oriented at present. Not particularly achievement oriented either. Poor self-motivation or response. School's interest in music: No instrumental programmes in primary feeder schools (apart from a bit of recorder). Not even much choral experience. Therefore only a handful have ever learnt an instrument. Choir, rock band, flute lessons, drum lessons, guitar lessons offered within the school. Venue and resources: Music room and classroom. Music room has piano, 3 electronic amps, 3 electronic keyboards, cassette, turntable, Atari computer (Notator programme) linked to Kawai K11 synthesizer. Curriculum: [NSW] Curriculum ranking of music activities: 1. Performance (recorder/instrument playing, singing, movement), 2. composition (notation skills, aural training), 3. aural, 4. Musicology (listening, music history/musicology, music in society/in the community). All of equal importance. All these [are] inter-related – should be integrated study.</p> <p>Class profile: Full range – quite high to <u>very</u> low (illiterate). Music background of the class: 1989 Elective Music Year 9 – the first real music most of them had encountered. Most only learnt to read music this year. Music lessons: 4 x 53 minute lessons per week.</p>
<p>Teaching approach - Personal ranking of music activities: (in this school) 1. Singing, 2. Recorder/instrument playing, 3. Notation skills/ improvisation/composition/arranging, 4. Aural training, listening/music history/musicology/music in society/in the community. I <u>hate</u> movement. Teaching method: Sight singing, sight reading using glocks. Lots of written work, and <u>lots</u> of practical group work. Pitch terminology and systems: Solfa where appropriate. Rhythmic terminology and systems: Rhythm drills (sightreading patterns etc.). Both American Notation names and the crotchets etc. Evaluation and assessment: Required by the curriculum and by choice. Classwork, participation, homework, testing. Preliminary opinion of The Pulse Music Album project material: It will be very useful in the kind of structure I have used previously. Particular compatible with the proposed course I will implement using the computer.</p>
<p>Project name: Phase Shifting Number of lessons: about 4 or 5 – plus homework! Familiarity of material: I have done a lot of work with a) untuned and b) tuned</p>

percussion 'scores' – simple ostinato-type things. Also pentatonic work along the same principles.

Objectives:

1. revision of rhythmic concepts, groupings
2. performance – reading the score, facility
3. aural awareness – recognition of patterns, feeling of pulse etc.
4. composition – using a formula
5. introduction to concept of pulse music
6. incorporate revision of pentatonic scale

Objectives actually quite well achieved.

Music skills/activities: Listening, performance, introduced class to compound time – rhythm drills, singing known songs etc.

No particular instrumental skills. Class has few instrumental accomplishments so we concentrate on reading, playing, using classroom instruments glocks, recorders, untuned percussion. I purposefully kept it simple at this stage.

Integration: No.

Technology – recordings of minimalist music: The pulse music examples [from the kit].

Composing activities –

Sound and symbol: symbol to sound: hopefully by Yr. 10 they are infusing these patterns so they can conceptualize sound from symbol.

Structure/form: Not discussed.

Composition pieces/exercises from *The Pulse Music Album* projects: yes

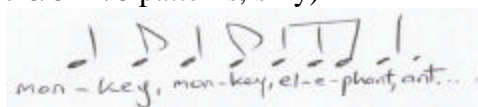
Compositions – original: a) written by me and developed by them;
b) created by them.

Compositions – time take to write: 2 x 50 minute periods (it was done in their books and on the board. Here is a copy!).

Composition – the process: The students made suggestions re rhythmic and melodic content and organisation. Also, when the pieces were played, they made suggestions as to which lines should be more important etc.

Composing as an incentive to the students' music learning: They seem to enjoy this because they can handle it and also they see the results fairly quickly.

Student composition titles: Yes, titles were an incentive. Zoe's suggestion: *Pentatonic Zoo* (because of the 6/8 12/8 patterns, silly)



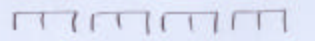
Performance –

Performing from notation, by ear, by memory: From notation – some weaker students simply played layer 1 – repeated over and over from memory.

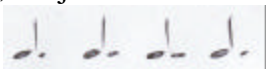
Improvisation: Not really, although the class experimented with making their own rhythmic and melodic motives to use.

Conducting: No, I played one of the lines which helped.

Pulse: Yes, we just had the steady 12/8



easier than



to keep it together.

Appraisal, evaluation –

Recording student work: The cassette player is always useful. Gives them a goal, enables them to hear the whole, not just their bit.

Response to the minimalist project – students: positive

Response to the minimalist project – teacher: positive

Project name: Canon

Number of lessons: 3 or 4

Familiarity of material: Yes – I do this sort of thing a lot in all classes:

1. Take a known tune, add rhythmic and melodic ostinati – class performance;
2. Invent a tune that works as a round – chord structure etc.

Objectives:

1. Develop concepts of polyphony, ostinato, canon;
2. Work on Atari Computer to continue to develop skills;
3. Write a canonic melody i.e. one that lends itself to canon or round.

Music skills/activities: Singing of simple rounds, canons.

Playing of simple rounds, canons.

Writing of simple ostinati.

Keyboard work for the computer.

Integration: No.

Technology – recordings of minimalist music: Not this time.

Composing activities –

Sound and symbol: Sound to symbol. Instrument – improvise ostinatos (glocks, guitars, keyboards, electric bass, untuned percussion) – 12 layers in all.

Structure/form: Observed canon in other compositions. Other imitative forms. Linear concepts.

Composition pieces/exercises from *The Pulse Music Album* projects: We started off using the folk-song *Land of the Silver Birch* which is the example given. Then they started to write their own – we did not complete this.

Compositions – original: The attached Manuscript took about 2 periods. The students put together the ostinatos – some weren't properly put on disk e.g. bass (guitar) and percussion.

Student input: Not particularly that I can recall.

Composing as an incentive to the students' music learning: Yes, working within a set implied harmonic structure was quite useful.

Performance –

Performing from notation, by ear, by memory: By ear.

Improvisation: Yes, most of the ostinati were originally developed with improvisation.

Conducting: 1. Conducted and played. Kept the pulse – held it together.

2. Helped get it into the computer.

Pulse: The pulse used was the computer click – slowed down.

Technology – sound source: We didn't record the work onto cassette but put them on a computer disk – we seem to have erased this unfortunately so I can't give a taped example BUT we printed a score before we lost it. (attached).

Response to the minimalist project – students: It was a bit too simple, and we did not get the chance to develop the ideas the way I intended.

Response to the minimalist project – teacher: Positive. We never got to really finish this properly – score not properly edited, no tape. Sorry.

Project name: Phase Shifting Melodies

Number of lessons: 2-3 plus homework.

Familiarity of material: Similar to a lot of melodic work I do. But usually the students do chord-based stuff. They had not tried to structure melodies with melodies in this way.

Objectives:

1. Structuring sensible melodies of different phrase lengths;
2. Structuring different melodies, sensible in themselves, that work when combined – concept 'Polyphony';
3. Rhythmic balance;
4. Choosing different tonal centres 'modes' orient towards other notes, not 'C';
5. Also to use the Atari Computer (Notator) for the first time.

Music skills/activities: Singing – polyphonic choruses

Instrumental activities involving melodies in combinations

Use of the Atari computer with Notator program.

Mainly keyboard skills for using the computer. All of them played their own compositions in, initially. Only one student knows keyboard.

Integration: No.

Technology – recordings of minimalist music: Not this time.

Composing activities –

Sound and symbol: Sound to symbol. They created their melodies using glochs, then tried to notate them – I helped with the rhythm. Then playing them into computer and edit the notation. Not always in this order – not all could work on the computer at once.

Structure/form: Polyphony, phrasing.

Composition pieces/exercises from *The Pulse Music Album* projects: yes

Compositions – original: not by the teacher, but by the students.

Compositions – time take to write: Not long. I've enclosed the most successful score. Some compositions did not go on to computer too well because of the student's technical limitations. I tried to keep out of it.

Student input: Only their own input creatively. Basically we followed the examples given – played them and then worked on individual ones (or in pairs). Actually it was

their idea to work in pairs and it worked well!

Composing as an incentive to the students' music learning: Yes, they enjoyed the dual objectives on: 1. Using this idea; 2. Using the computer. They enjoy composition.

Student composition titles: No titles.

Performance –

Performing from notation, by ear, by memory: All of these.

Improvisation: Yes, nothing worth preserving – but using glockenspiels they initially had to invent a motive and then maintain it while other students improvised above it.

Conducting: No, the computer kept time! Yes, generally they follow a pulse well.

Pulse: The basic computer pulse was 120 but maybe we altered it – can't remember.

Appraisal, evaluation –

Recording student work: We used the computer. Yes – very useful of course. Instant feedback.

Response to the minimalist project – students: positive

Response to the minimalist project – teacher: positive

How the project(s) fitted into the music programme: A bit of both – making room and fitting into the usual music programme. It was useful, very useful for what I was doing in terms of the curriculum. However, on reflection, I really used it more as a general compositional resource, rather than teaching them about 'Pulse Music' as such, even though this was the initial aim.

Music lessons planned in advance or immediate: Never! Not in this school. With these kids it is better to let things move along as they happen.

Minimalist projects outside the classroom: We never really finish anything to a concert standard. Also almost all Term III was spent in performance preparation for a) choral concerts in the Sydney Opera House; b) our school concerts series; c) school production of *Grease*, ugh!

Options from *The Pulse Music Album* projects: Not really used. We tended to develop our ideas from the basic concept.

Ability to achieve a balance between various music activities and concepts: No problem.

Role of the cassette player: Cassette player was useful.

Student reaction to minimalist excerpts on the kit's cassette tape: Caused different reactions which fueled discussion. The actual pulse music examples are much too short to give a fair rendition of the effect of a composition in this style.

The album of projects –

The projects as a sequential programme: The instructions did not say to do this. In the booklet it says "use the projects in whatever order you wish". I prefer to pick and choose.

Age group suited to the projects: I can't really say as I did not do them all, but I felt that the phase-shifting melodies and canon were suited to my lot.

Strengths and weaknesses of the projects: In its present form it is less suitable for Secondary than Primary – pitched more at the 9-12 age group I feel.

Future use of project material: Yes, I intend to keep the kit for future if possible and as

the situation allows use more of the projects. The ones we did were good.

Teacher's response to minimalist project material:

Students' response to minimalist project material: They liked the melodic ones best. The main reason we did not do more was that the actual composition process began with the kit but led to other things more in their line of interest e.g. we went on with the song writing and then Blues improvisations – where they basically spent the rest of the year.

Compositions associated with Teacher No. 11 written in response to the Phase Shifting project

11.1 *Pentatonic Zoo*



1.	composed by a female student	6.	quaver = c.110
2.	performed with metallophones and drum	7.	score by the student composer
3.	drum played a quaver pulse. Each cell repeated twice.	8.	one complete take – slow, steady pulse, ragged ensemble
4.	playing time 1 min 14 secs	9.	CD for Appendix 8 Track 1
5.	development of metre, pulse and instrumentation		

Compositions associated with Teacher No. 11 written in response to the Canon project

11.2

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Page 2

Page 3

1.	composed by teacher and class	3.	computer score by students
2.	development of construction and instrumentation		

Compositions associated with Teacher No. 11 written in response to the Phase Shifting Melodies project

11.3

The image shows a handwritten musical score for a piece titled "Phase Shifting Melodies". The score is written on three systems of two staves each. The notation includes treble clefs, a key signature of one flat (B-flat), and a 4/4 time signature. The music features a mix of eighth and sixteenth notes, with some rests and dynamic markings. The title "Phase Shifting Melodies" is written in cursive at the end of the third system.

1.	composed by two students	3.	computer score by students
2.	development of register		

Teacher No. 33: see Appendix 7 for the teacher profile

Scores and transcriptions: 33.8 – 33.12

Recording(s): CD 8 Tracks 2-6

Compositions associated with Teacher No. 33 written in response to the Phase Shifting project

33.8, 33.9, 33.10, 33.11, 33.12

4r9 EL (Phase shifting)					
1) Anna	F. 17			(4 x)	
2) Sandra	è è è è è				
3) Mirya	I like chocolate;				
4) Sarah	17 17				
5) x516	17 è				

1.	score sheet submitted by teacher	2.	CD for Appendix 8 Tracks 2-6. Composition 33.11 (No. 4) is possibly Track 5.
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33.8

1.	composed by female student	6.	crotchet = c.94
2.	performed by clapping	7.	score transcribed by researcher
3.	cells repeated twice despite indication in score of 4 times	8.	one complete take – steady pulse, accurate performance
4.	playing time 25 secs	8.	CD for Appendix 8 Track 2
5.	expansion of structure		

33.9
Page 1

Page 2

1.	composed by student	6.	crotchet = c.123
2.	performed by clapping	7.	score transcribed by researcher
3.	cells played once with the central cell 6 repeated 3 times	8.	one complete take – accurate performance
4.	playing time 37 secs	9.	CD for Appendix 8 Track 3
5.	expansion of structure, intensification of minimalist effect		

33.10

Chocolate I like.

1.	composed by female student	6.	crotchet = c.134
2.	performed with chanted voices	7.	score transcribed by researcher
3.	cells repeated uneven number of times	8.	one complete take – steady pulse, difficult to hear entries and repeats
4.	playing time 27 secs	9.	CD for Appendix 8 Track 4
5.	expansion of structure		

33.12



1.	composed by student	6.	crotchet = c.127
2.	performed by clapping	7.	score transcribed by researcher
3.	cells repeated uneven number of times	8.	one complete take - difficult to hear entries and repeats
4.	playing time 27 secs	9.	CD for Appendix 8 Track 6
5.	expansion of structure		

Teacher No. 60

Teacher profile No. 60 : female music teacher in a public secondary girls' schools in Sydney, Australia - 15 year old age group	
Identification	
Teacher: No. 60 – music teacher, girls' secondary school Gender: female Study age group: 15 years School location: Sydney, NSW Study project(s): Phase Shifting; combination of Music Weaving/Phase Shifting B Study timing: March – September 1990 Recording(s): yes Scores and transcriptions: 60.1 – 60.5 Recording(s): CD 8 Tracks 7-11	
Education, preference, experience	
Qualifications: B.Ed. (Music); B.A. (English/Music). Preferences (experience) – Music Activities: Play an instrument Sing Write/arrange music Improvise music	
Preferences (experience) - Musical styles: Western classical music – pre 20 th C Western classical music – 20 th C Pop/rock Jazz, blues, piano blues Musicals Folk Music of other cultures	
Years of teaching experience: 13 years	

Years of teaching in this school and ages taught: 3 years teaching 11 – 18 years.
Years of experience teaching the age group of the study: 13 years
Experience teaching twentieth century art music styles: Too many to say. In different ways; if looking at metre, we use all sorts of music to illustrate – non-metrical, multimetrical etc. etc. from all different periods, styles, cultures rather than show that periods and types of music must be studied separately. We look at common threads at the 2 Unit Course 1.
Experience teaching music of other cultures:
 Vietnamese/Greek/Indonesian/Indian/Chinese – group projects in non-elective classes.
 Scottish.
 African in relation to jazz.
 Jamaican Yr. 8, Yr. 11 2 Unit Course 1.
 We sing, dance, play, explore features and origins.

Teaching environment

School -

School situation: Sydney, NSW

Public or private: public girls' school

How long has the school been open:

Level: secondary

Socio-economic background of parents: The school is a D.S.P. school. Quite a sizeable proportion live in poor accommodation, and very few have the luxury of private lessons whether in music or whatever. Roughly 80% are first generation Australians, their families most often coming from Lebanon, Greece, Vietnam. Although more and more seem financially secure, "traditional" values firmly define the girls' roles.

School's interest in music: Over the years a strong music department (with a sympathetic principal) has built up a keen interest in music via musicals, choir, dance troupe, band etc. Students have been involved in a wide range of community activities. While few learn an instrument outside, the ethnic background of most students encourages them to express themselves in song and dance.

Two choirs (Year 7 and senior level) – involvement in regional choir.

Small band, dance (jazz), Dance groups – jazz and folk; Theatre Arts musical for Year 11.

Venue and resources: 3 music rooms – each is set up for different activities, so classes swap around.

Very well equipped.

10 keyboards, band instruments, 10 guitars, electric lead and bass guitars, drum, double cassette recorder, 3 stereos, Atari 1040 S1 Computer and Notator software, 2 synthesizers, Spanish/South American percussion, xylophones, glockenspiels, usual percussion.

Curriculum: State (NSW)

Curriculum ranking of music activities: 1. Recorder/instrument playing, singing, improvisation/composition/arranging; 2. Aural training, listening; 3. Notation skills; 4. Music in society/ in the community; 5. Movement; 6. Music history/musicology.

Class –

Class age: 14-15 years

Gender of class: girls – no boys!

Class level: Year 9 elective music.

Class mix: Mixed ability, but overall above average. 20 students in the class.

Music background of the class: Most have previous background of music and can read simple music.

Number of music lessons for project class per week: 4 per week

Length of lesson: 40 minutes

Teaching approach

Teaching approach -

Teaching philosophy:

(See 'Credo')

Credo.

There has probably never been a time when teaching music has been as exciting and as important as now. I believe that music serves to confirm and revive humanness in an age which is increasingly impersonal and mechanistic.

While most teenagers enjoy music, their experience is usually very limited and their participation disturbingly passive. As a teacher I intend to motivate the student "to listen with purpose, discrimination and concentration" (Pettler *Teaching Music Today* 1977 p.3); to discover the fun of making music and to appreciate a wide variety of music. To achieve these aims, specific skills must be developed, including competence in singing or playing an instrument, the ability to read and notate music; an awareness of tone colour, structure and harmony, together with the ability to discriminate changes in pitch, rhythm and volume.

However these tangible goals, perceptible to students, remain secondary to my major objective. Music, for me, epitomises all that is non-pragmatic and non-assertive, and I consider that

*rhythm and harmony can penetrate
deeply into the mind and take a
most powerful hold on it, and,
if education is good, being and
impact grows and beauty.*

(Plato The Republic, Part 7 Book 3 P.783)

For many students the beauty, mystery and emotiveness of music may not only enrich their lives but inspire a revelation about the fundamental nature of life itself.

Equally important is the degree of co-operation and tolerance demanded by music in practice and principle. Ensemble work demands and ensures interdependence without diminishing the participant's individuality - providing the

microcosm of the ideal society! So, in all aspects of class work I try to foster non-competitiveness, encouraging all students to help and value each other's efforts, the achievement of one becoming the achievement of all. Marks serve to identify problems and register progress but have no inherent significance.

However I also try to ensure that the opportunities music can proffer for self-expression and realisation are not stifled in serving the requirements of the group nor by the demand for stereotyped answers that lack originality and meaning. As far as practicable, each student should have the opportunity to explore and develop their natural and acquired abilities at their own rate of progress, ultimately acquiring "a realistic awareness of her weaknesses and inadequacies" and strengths, together with "positive regard of her worth" as a person. (R.E. Mason *Contemporary Educational Theory*, 1978 P.152)

My role is that of a catalyst, and my task accomplished when the individual becomes independent of my function to stimulate, direct and assess, and has both the desire and the means to pursue music beyond the confines of the classroom whether as a pastime or a profession. For active participation rather than passive receptivity is inseparable from knowing that joy of life which encompasses and reconciles all facets of experience.

In summary:

Why I teach -

I love kids.
I love teaching.
I love life and humanity in all its forms.

I do not love Music. It is indispensably part of me.

Personal ranking of music activities: 1. Singing; 2. Recorder/instrument playing; 3. Listening; 4. Aural training; 5. Notation skills; 6. Movement; 7. Music in society/ in the community; 8. Music history/musicology.

Teaching method:

Techniques of Teaching: I use a varied assortment of styles and approaches, but always my teaching is very practical with theoretical concepts realised through experience.

Ideally, I like to have a mixture of listening, playing, composing and discussion/learning in every lesson. A mixture of cultural/historical traditions is used.

Orff work has a large influence.

Every student learns at instrument. All sing. Each is encouraged to work step-by-step as an individual, and to participate in ensemble work.

Group work is much used; groups plan and play percussion scores, summarise topics, analyse recordings, compose songs on environmental themes or whatever. Learning instruments is largely done in threes.

Students are encouraged also to assess their own work, devising as a class appropriate criteria.

Dance and movement are also used to reinforce ideas – e.g. to emulate the texture or form of a piece.

Classes are largely student centred.

Most tasks are devised so that they be accomplished on any one of several levels – so the slower or novice student can achieve something, but the more advanced student can fully utilise their skills and knowledge e.g. write a screen play and compose a film score to accompany it.

Recently we have incorporated our Atari S1 computer into more of our work, especially composition.

Mainly I use practical experimentation – sound first, theory later. At first graphic notation is usually used to facilitate recording ideas. Quite a lot of Orff work.

Pitch terminology and systems: Sometimes use solfa (it works, but I don't like it – it's artificial, constrictive). If I had the time, I'd like to develop the students' 'perfect' pitch – hear a note it's "A" etc. They'd sing the notes written to their letter names to increase their pitch awareness and accuracy.

Rhythmic terminology and systems: Sometimes use French time names.

Evaluation and assessment: Required by curriculum and by choice. Multiple ways: students devise methods of assessing A/B/C grades, and largely assess their group and individual work. By discussion, by comparison, by watching their response, by seeing their success or problems in revision tasks, by grading compositions, performances, listening exercises and the very occasional "exam".

Preliminary opinion of The Pulse Music Album project material:

I certainly intend to use all the projects, so does my fellow music teacher. I will be using the projects with a (mostly) bright, though technically mixed ability Year 9 elective class of 15 year old girls. My fellow music teacher will be working with a year 7 class of 12 year old girls. We'll each file reports.

I find the projects exciting and practical, and am looking forward to using them.

They will fit in, and also I'll have to create a special place. The specific class I have targeted will do the series of projects as a separate unit. Other classes will have ideas adapted from the project to reinforce or introduce pitch, rhythm and structural concepts which are already an integral part of the course.

Project name: Phase Shifting

Number of lessons: Two

Familiarity of material: Reading, clapping, playing on xylophones rhythms devised by students.

Objectives: Confidence in composition and performance;

Revision of sight-reading of simple rhythms;

Responding to gradual shifts in accent.

Music skills/activities: After class composition small groups composed and taped their compositions based on the model.

Collaboration: None.

Technology – recordings of minimalist music: Not used.

Composing activities –

Sound and symbol: Basically they wrote first then played, adapting notation if difficulties arose.

Structure/form: Not discussed.

Composition pieces/exercises from *The Pulse Music Album* projects: First played example adapted by myself from album.

Compositions – original: Students composed the piece together as a class; small groups composed pieces.

Compositions – time take to write: 40 minutes

Composing as an incentive to the students' music learning: Yes – a simple formula to use encouraged all students to participate in composition.

Student composition titles: None.

Performance –

Performing from notation, by ear, by memory: Played a bar and then we would work out the notation.

Improvisation: None.

Conducting: The students suggested the need for me to count (for some groups),

simplifying the rhythm (splitting  proved a big problem in the permutations).

Initially I counter – aloud then silently. Later, students kept the pulse. The whole class piece I conducted. With small groups they did their own work, and I only assisted one.

Pulse: Most groups needed a pulse; it was quite difficult to find someone who could keep it accurately. Generally a moderately slow pulse was used – sometimes clicked, sometimes said.

Performance process: Handling  was difficult – trying to split it

(i.e. ) caused problems, because we spent too long just handling the

rhythms. Next time, we'd keep  as a single unsplittable unit.

Shifting Phase – composition by whole class: whole pattern played twice/ then each student repeated any bar as often as they chose. After beat on tambourine, all gradually progressed to last bar. Another beat, all played it in unison.

Appraisal, evaluation –

Recording student work: Yes. Very useful – hearing pieces back gave them impetus

lacking earlier, and they heard the need for accuracy. Re-taping and polishing was very valuable though we lacked time to do so properly.

Response to the minimalist project – students: 50 – 50. They yearn to play a tune to put it simplistically. After hearing the taped examples for the initial survey they were negative to begin with.

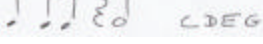
Response to the minimalist project – teacher: I was disappointed that the students laboured more than expected with accurately playing rhythms; most could, but those that couldn't made difficulties [resulting in] a muddy sound where the rhythmic changes were obscure and in consequence, meaningless.

Project name: Combination – Music Weaving/Phase Shifting B

Number of lessons: 2 (3)

Familiarity of material: Similar to any number of compositions composed and played by students, and exercises completing bars. Also 'rounds' using students' names for rhythms etc. Different in many ways too!

Objectives:

1. Revising sight reading  melody;
2. Revising accurate notation (i.e. writing clearly);
1. Revise completing bars according to time signatures;
2. Ear-training: developing listening skills to perceive and enjoy the gradual shift of pulse.

Objectives were generally achieved at various levels according to the individual.

Melodic work was abandoned as whole class could not participate accurately enough.

Music skills/activities: Echo clapping, melody repeating. Trying out different instruments, discussing which sounded best with the rhythms composed. When using glock. Initially (later abandoned) dampening sound.

Collaboration/ integration: No.

Technology – recordings of minimalist music: No.

Composing activities –

Sound and symbol: Symbol first – we compose usually the other way around, but this was more convenient for quick revision of sight reading and time signatures.

Structure/form: Very briefly mentioned contrast and unity (concepts recently done in class work).

Composition pieces/exercises from *The Pulse Music Album* projects:

Compositions – original: Children composed the piece.

Compositions – time take to write: One lesson

Composition – the process: Students composed piece, of course, and simplified it from the melodic version we began with.

Composition by whole class 60.5: whole pattern played twice, then each student repeated any bar as often as they chose. After beat on tambourine, all gradually progressed to last bar. Another beat all played it in unison.

Student input: Necessity to keep pulse came from them and for signal to suggest when

to move to last bar and the sort of signal it might be.

Composing as an incentive to the students' music learning: Yes it was but we do do this kind of work all the time – composition is a major strand in all our music work. The simplicity of the model however did encourage students to compose, likewise the instant feedback.

Student composition titles: None.

Performance –

Performing from notation, by ear, by memory: Combination – emphasis was on notation, but many relied increasingly on memory.

Improvisation: Just as far as students 'knowing' when to go to next bar, and when signal would be given to move towards last bar and finish.

Conducting: A student kept the pulse. While we had a separate student play the 'signals' re when to move towards end etc. they still looked to me to confirm it was OK. Having a wide range of ability in the class, one or two had trouble sight-reading and (even at this elementary level) this caused some confusion re pulse. The advantage of this project was that they could repeat any bar ad nauseum until they were really secure and this was useful to their ego and sight reading skills.

Pulse: Yes. Pulse of moderate speed.

Appraisal, evaluation –

Recording student work: Of course! Yes – always useful. How else can they objectively hear the effect of the whole? And they love hearing something they have done – tangible achievement. Hearing it a couple of times enabled us to trace some individuals' 'path' to the end.

(Note on cassette case – 60.5) – Shifting Phases composition by whole class: whole pattern played twice; then each student repeated any bar as often as they chose. After beat on tambourine, all gradually progressed to last bar. Another beat, all played it in unison.

Response to the minimalist project – students: Eventually yes, to greater and lesser degrees.

The piece only came to life when I added an improvised melodic, harmonic part over the top; before that, students felt it was a bit boring, and more of an exercise than 'real' music. However, their focus was on the rhythmic variations and they (mostly) found their satisfaction in listening to that.

Sorry, I can only manage a paraphrase of comments: "it sounds really good", "yeah I like hearing it all come together".

Response to the minimalist project – teacher: Eventually yes.

How the project(s) fitted into the music programme:

I largely had to 'make room' for them, which surprised me; tasks which seemed simple needed more preparation than I had expected in enabling the students to complete them. With more familiarity with the projects I could more easily incorporate Pulse lessons. The big problem was doing the project so early in the year (initially) when my students

largely hadn't acquired elemental skills in sight-reading and were just anxious to be able to perform/read traditional music.

We were unfortunately able to do only two of the projects (for the moment). It proved harder to incorporate than I expected and initial antipathy towards the work by students made me delay – and delay – progressing further.

Subsequent lessons worked much better and were enjoyed. My colleague was not able to utilise projects this year.

Music lessons planned in advance or immediate: A week (or so) in advance after I thought I'd given enough preparation re. Reading, writing music.

Minimalist projects outside the classroom: No.

Options from *The Pulse Music Album* projects: Phase Shifting Option B was fine – students could hear the changes occurring and enjoyed that.

Ability to achieve a balance between various music activities and concepts: No. I was only able to incorporate pitch and rhythm (we were looking at harmony later in the year).

Role of the cassette player: Vital – it was a great incentive for students to polish their work and hearing it back meant they (and I) could concentrate on the overall effect created (so vital for Pulse Music) instead of just hearing their own part.

Student reaction to minimalist excerpts on the kit's cassette tape: Many hated overall pulse examples and unfortunately this made them unenthusiastic about trying pieces using similar techniques.

The album of projects –

The projects as a sequential programme: Having not used it as much I feel I can't really comment.

I think it is better spread out a bit, but not too much; if activities are done close together, the ear becomes more acute. However students tended to find a bit of Pulse Music went a long way. More senior classes could probably benefit from a concentrated course.

Strengths and weaknesses of the projects: Know the class before using them and have an intimate knowledge of what they can and can't do, finding different levels of tasks for students where necessary so that a satisfactory result can be achieved. Lack of precision made pieces very unaesthetically satisfying!

Modifying the task for the group is essential.

The tasks are great for revising rhythm – not for teaching it as I had to do!

They can sound rather monotonous and unsatisfying for students looking for a tune.

For students who are a bit more sophisticated or who have had a chance to play and sing traditional music, the projects are great to make them more perceptive and innovative as listeners and composers.

Future use of project material: The ideas are great and I am incorporating them in work for my Year 12 too.

Teacher's response to minimalist project material: Phase Shifting – Option B modified was much more successful.

Again, we were too ambitious at the start trying to add melody as well as rhythm.

However after a class exercise, the class split into little groups who composed and

performed their own pieces with varying success. Keeping a pulse going and using different instruments to vary the tone colour made the piece more enjoyable to the students who enjoyed hearing the increasing tension and move towards resolution. I added a steady beat, and improvised a simple melody then chord sequence over the top to make it a little more palatable for students.

We worked with the material over only 6 lessons. The notational problems were unexpected and made simple projects drag on explaining how to play notes and what the structure was.

Students' response to minimalist project material: They really disliked the first Phase Shifting rhythm exercise for 2 reasons: from our own composition, we split the quavers, making the rhythm too difficult to play in its various permutations e.g.



Later attempts to simply were successful, but drew the lesson out too long. In group work, some had to have me helping keep beat, give time names. Also the piece sounded simply boring to the students who (as a mixed ability group) had trouble playing the rhythms accurately, at the start of the year.

Compositions associated with Teacher No. 60 written in response to the Phase Shifting project

60.1

1.	composed by whole class	6.	crotchet = c.112
2.	performed by students clapping with untuned percussion on pulse	7.	score transcribed by researcher
3.	first cell played seven times then cells played once	8.	one complete take
4.	playing time 30 secs	9.	CD for Appendix 8 Track 7
5.	development of metre		

60.2

1.	composed by 6 female students	6.	crotchet = c.85
2.	performed with click sticks and drum	7.	score transcribed by researcher
3.	first cell played seven times then cells played once	8.	one complete take. Begins with a group of players but ends up with one playing top line.
4.	playing time 40 secs	9.	CD for Appendix 8 Track 8
5.	development of metre		

60.3

1.	composed by 6 female students	5.	crotchet = c.130
2.	performed by students chanting with drum on the pulse	6.	score transcribed by researcher
3.	first cell played six times, second cell played twice, then each cell played once; simplification and distortion of phase shifting process	7.	one complete take. A voice is reciting the French time names of the rhythms in background. Tempo speeds up from cell four to the end.
4.	playing time 23 secs	8.	CD for Appendix 8 Track 9

60.4

1.	composed by 5 female students	6.	crotchet = c.125
2.	performed by students clapping with maracas on the pulse	7.	score transcribed by researcher
3.	first cell played eight times, then each cell played once	8.	one complete take. A voice is reciting the French time names of the rhythms in background. Tempo speeds up from cell four to the end.
4.	playing time 40 secs	9.	CD for Appendix 8 Track 10
5.	development of metre		

60.5

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1.	composed by whole class and teacher	6.	crotchet = c.49
2.	performed by students playing maracas and teacher improvising at the piano	7.	score transcribed by researcher
3.	maracas played first cell played twice, player's choice of rotation played 12 times, seven repetitions to return to cell one, and cell one played twice in unison. Tambourine used as aural director of the piece giving signals.	8.	one complete take – performance at one dynamic level
4.	playing time 1 min 50 secs	9.	CD for Appendix 8 Track 11
5.	expansion of structure		

Teacher No. 73

Teacher profile No. 73 : a male music teacher in a ‘disadvantaged’ secondary school in coastal, New South Wales - 15 and 18 year old age groups	
Identification	
<p>Teacher: No. 73 – secondary music teacher in a public school classed as ‘disadvantaged’ Gender: male Study age group: 15 (18) School location: Coastal New South Wales, Australia Study project(s): Phase Shifting Study timing: 1990 Scores and transcriptions: 73.1 – 73.6 Recording(s): CD 8 Tracks 12-17</p>	
Education, preference, experience	
<p>Qualifications: B.A., Dip.Mus. Preferences (experience) – Music Activities: Play an instrument Sing Write/arrange music Improvise music Dance Listen to music Read books on music</p>	<p>Preferences (experience) – Musical styles: Western classical music – pre 20thC Western classical music – 20thC Pop/rock Jazz Musicals Minimal music New Age music Country and Western Folk Music of other cultures Other (all)</p>
<p>Years of teaching experience: 15 years Years of teaching in this school and ages taught: 12 years Years of experience teaching the age group of the study:15 years Experience teaching twentieth century art music styles: As part of the senior syllabus. The first 20th century techniques encountered is usually the graphic notation lesson which is used as a means of establishing performance techniques on tuned percussion. Simple performance skills such as dynamic variation, tempo variation, textural variation, exploring and contrasting timbres can be encountered easily. This is a legacy of the George Self, John Paynter “exploring sound” school which I used almost exclusively in my first years of teaching. Graphic sound composition is very useful at this beginning stage of musical experience. I also had to place it into perspective along side the much greater tonal tradition of music. The works encountered in the ABC Meet the Music 6.30 series is a good resource that I have used.</p>	

You are correct in your assumption of teacher training and current practises. Unless teachers have kept up with 20th century music since their training those in my vintage would still be in the Stockhausen era. This is why work such as the pulse music kit is refreshing in that it can help to fill in the gaps.

Experience teaching music of other cultures: Indonesian, African, Latin – practical projects. Much of the lesson material (although not all) comes from the current culture or is of no specific style at all (elemental music in the style of Orff using ostinato, bass line, modal melodies and simple chordal major and minor patterns). The common styles are: jazz, some rock, Latin American, ethnic, folk, 20th century composition. All styles lend themselves to improvisation.

Teaching environment

School -

School situation: coastal New South Wales, Australia.

Public or private: public

How long has the school been open: 18 years

Level: secondary

Number of students: 1,200

Socio-economic background of parents: working class, high unemployment, high single parent families. Mining, electricity industries.

General information about the school: Pioneered many aspects of practical music making in the classroom, following Orff-based methods.

A growing instrumental program, concert bands etc.

School's interest in music: Strong. A designated school of excellent in music.

Venue and resources: Two music rooms and one portable classroom. Most things from tuned percussion, timpani, synthesizer, conga, bongos etc. Latin percussion.

Curriculum: NSW music curriculum junior and senior. 2 Unit Course One, 2 Unit Course Related.

Curriculum ranking of music activities: All of equal importance in the final analysis however I begin with improvisation. Many are linked.

Class –

Class age: 15 to 17 years old – average age 16

Gender of class: 4 boys, 6 girls

Class level: Year 10 elective music; one of two year 10 classes

Class mix: mixed ability

Music background of the class: Four years of practical music making. Most have participated in music camps, concerts, attendance at Opera House concerts.

Approximately five are highly motivated musicians attending two night rehearsals per week, performing and composing.

Number of music lessons for project class per week: 5 periods per week

Length of lessons: 40 minutes

Teaching approach -

Teaching philosophy:

The philosophy of the work I have been engaged in in recent times in many ways is a

rejection of the traditional methods of teaching that placed great emphasis on teaching specific classical works and composers (the historical perspective), the basic repertoire). The emphasis has moved towards working specifically with **the elements of music**. Lesson material is chosen on the basis of how well it can be adapted to classroom performance, improvisation and analysis. Using this philosophy it is just as relevant to work with the samba as it is the fugue. It also means (particularly in the junior school) that if a style or musical period is not covered it doesn't really matter.

Educational aims:

1. Music lessons should be practical and skill based
2. Music lessons should use a combination of teaching techniques – movement, instruments, voices, speech, improvisation, listening, analysis, composition, notation, musicology, theory;
3. Music lessons should be presented in logical sequence from simple to complex; from known to unknown.

Evaluation and assessment: Required by the curriculum and by choice. Test paper, practical class based. Most evaluate each other every lesson as skills are self-evident.

Preliminary opinion of The Pulse Music Album project material: They will fit into the curriculum.

I would like to reduce the techniques of the kit to one work using a combination of the shorter examples and then make an attempt to relate those techniques encountered to a specific work or works in the repertoire. Realistically there is only about 5 to 10 (40 minute) lessons that can be spent on any one topic in the senior school and 1 to 4 say in the junior school. You have to work on short quality productions rather than quantity, and get on to the next topic to sustain interest within the time frame (2 to 6 lessons per week). It is also important for the performance to be pleasing musically.

Project name: Phase shifting

Number of lessons: 10 lessons

Familiarity of material: Yes. Practical project based on musical skills involving the elements of music. Creative input.

Objectives:

1. To link a practical component with the listening to music
2. To provide composition techniques that are accessible to this age group.

Music skills/activities: Listening, score reading, discussion of Reich concert in Sydney Opera House. Instrumental skills. No movement was used.

Collaboration/integration: Mathematical techniques employed.

Technology – recordings of minimalist music: I play the CD of Drumming and attempt to single out some of the techniques used in this work for performance. Students can become quite involved with the music. Many [students] sat on the floor with the lights off and found it totally acceptable, and interesting.

Composing activities –

Sound and symbol: Most used writing

Structure/form: Minimalism highlights the nature of change in music.

Composition pieces/exercises from *The Pulse Music Album* projects: Yes.

Compositions – original: Students

Compositions – time take to write: Each group had to come up with a product within 80 minutes ready for taping.

Composing as an incentive to the students’ music learning: The emphasis was on getting a result quickly. Many pupils will take too long.

Score/recording: Two scores and recording.

Performance –

Performing from notation, by ear, by memory: By ear and/or notation.

Improvisation: Improvisation, experimentation ----> then composition.

Conducting: Some required [the] teacher, others not.

Technology – sound source: I play parts of the [kit] tape.

Performance process: I use the phase shifting and add and subtract techniques as outlined in the kit for both junior and senior classes. I also perform Riley “In C” from the score, and Reich “Clapping Music” from the score.

Appraisal, evaluation –

Recording student work: This always puts them on their guard and gets better results.

Response to the minimalist project – students: Yes they enjoyed working on the project. Some found it a little boring at the start.

Response to the minimalist project – teacher: Yes, I enjoyed working on the project.

How the project(s) fitted into the music programme: It was incorporated. Skill-based activities are easier to fit in than if you are dealing with a fixed body of factual information.

Music lessons planned in advance or immediate: One week to the next. Most resources, tapes, instruments and techniques are at hand.

Ability to achieve a balance between various music activities and concepts: I didn’t use this project as an involved integrated process. You only have a short period, one to two weeks on any activity before you have to change an activity. I only use two of the projects – phase shifting rhythms, phase shifting melodies.

Role of the cassette player: Essential.

Student reaction to minimalist excerpts on the kit’s cassette tape: Enjoyed.

The album of projects –

The projects as a sequential programme: Difficult to sustain all the projects on one composition style (although extensive). Possible use it in the junior school then later in the senior.

Age group suited to the projects: Self-evident.

Strengths and weaknesses of the projects:

Possible a link with technique and actual work;

I like the elemental break up of rhythms, melody, chord etc.;

I like the accessibility of each project;

This would be appropriate for all ages primary to senior secondary.

Future use of project material: I will probably include a minimalist unit every year. I

like to link specific composition techniques with a specific composition, creating an active, aroused listening experience e.g. 1. Here are some techniques to use; 2. Here is a musical example from the real world.

Teacher's response to minimalist project material: Yes.

Students' response to minimalist project material: Most enjoyed the project. This class is probably a bit casual with regard to practical projects. I am now finding they want traditional listening lessons, Western tonal tradition, the symphony etc. The curiosity has been aroused, many have requested a copy of the music of Mozart, Beethoven etc.

Compositions associated with Teacher No. 73 written in response to the Phase Shifting (Melodies) project

73.2

1.	composed by two female students	6.	crotchet = c. 65
2.	performed on metallophones	7.	score transcribed by researcher
3.	3 bar phrase repeated 4 times; 4 bar phrase repeated 3 times	8.	one complete take – strong, accurate performance
4.	playing time 30 secs	9.	CD for Appendix 8 Track 13
5.	development of metre, mode and melody		

73.3

1.	composed by two male students	6.	crotchet = c. 127
2.	performed on xylophones	7.	score transcribed by researcher
3.	5 bar phrase repeated 4 times; 4 bar phrase repeated 5 times	8.	one complete take – vibrant, accurate performance
4.	playing time 38 secs	9.	CD for Appendix 8 Track 14
5.	expansion of style and feel		

73.4

1.	composed by two female students	6.	quaver = c. 155
2.	performed on metallophones	7.	score transcribed by researcher
3.	perhaps a 6 bar phrase repeated twice and a 5 bar phrase repeated 3 times?	8.	one complete take – pulse regular, but many inaccuracies
4.	playing time 30 secs	9.	CD for Appendix 8 Track 15
5.	development of harmony		

73.5

1.	composed by two female students	6.	crotchet – c.77
2.	performed on metallophones	7.	score transcribed by researcher
3.	4 bar phrase repeated 3 times and a 3 bar phrase repeated 4 times	8.	one complete take – accurate performance
4.	playing time 37 secs	9.	CD for Appendix 8 Track 16
5.	development of structure and metre		

73.6

1.	composed by two male students	6.	crotchet = c. 132
2.	performed on xylophones	7.	score transcribed by researcher
3.	4 bar phrase repeated four times and 3 bar phrase repeated 5 times	8.	one complete take – inaccuracies in lower part
4.	playing time 30 secs	9.	CD for Appendix 8 Track 17
5.	expansion of style and feel		

Teacher No. 76

Teacher profile No. 76: a female music teacher in a 'disadvantaged' public secondary boys' school in Sydney, Australia - 15 year old age group	
Identification	
Teacher: No. 76 – secondary music teacher in a public school classed as 'disadvantaged' Gender: female Study age group: 15 year old age group School location: Sydney, NSW Study project(s): African Rhythms Study timing: February – March 1990 Scores and transcriptions: 76.1 Recording(s): CD 8 Track 18	
Education, preference, experience	
Qualifications: B. Mus. Ed. Preferences (experience) – Music Activities: Play an instrument Sing Write/arrange music Listen to music Read books on music Years of teaching experience: 7 Years of teaching in this school and ages taught: 13-18 years Years of experience teaching the age group of the study: most students 2 years Experience teaching twentieth century art music styles: Schoenberg – looked at his different phases and pupils – wrote 12 tone music, looked at expressionism. Stravinsky – looked at rhythm and tone colour, use of chords e.g. primitivism, neoclassicism.	Preferences (experience) - Musical styles: Western Classical music 20thC Pop/rock Minimal music Music of other cultures

Debussy – impressionism – observation only of the elements.

Britten – A Ceremony of Carols.

Also we composed whole tone melodies and also in the ‘style’ of Stravinsky.

Minimalism – both in classical and pop e.g. ‘Merry Xmas Mr. Lawrence’ by Sakumoto (film), ‘Zoolook’ by Jean Michael Jarre, and ‘Floe’ from ‘Glassworks’.

Sculthorpe: Sun Music

Meale: Clouds Now and Then

Usually we listen or perform, observe, analyse and then try to write the music and then perform our compositions.

Experience teaching music of other cultures: African as a basis for jazz (origin).

Looked at stylistic features. Jamaican (ties in a lot with African) as a basis for reggae.

Spanish – mainly Spanish composers e.g. de Falla. Visited Mexico and Brazil – Musica tropical, Latin American instruments and dance rhythms – tango, samba.

Teaching environment

School -

School situation: Sydney, NSW

Public or private: public

How long has the school been open:

Level: secondary

Number of students: 715

Socio-economic background of parents: Many of the pupils come from a non-English speaking background. There are more than 20 different nationalities in the pupil population. Many of the parents are working class – some are unemployed or on compensation. Because they are economically disadvantaged, our school is classed as ‘disadvantaged’ where we receive funding to implement special projects to help overcome social, cultural and economic problems.

Their background, I feel, is particularly important on how they perceive life and school.

General information about the school: In general the boys are quite good at this school, although problems are encountered e.g. arrogance – particularly with Turkish boys; truancy; abuse in the home. Also, often it is an uphill battle to remind them to practise etc. Conflict situations are not good at this school and some of the kids do go ‘off beam’ for no reason. At this school we have employed itinerant teachers of the Behaviourally Disturbed! for special cases.

School’s interest in music: Medium to strong. When I first came to the school in May 1983 the pupils had a negative attitude to music. Since then I have built it up so that there are elective music classes throughout the school. We have four rock groups and are building up a concert band. We also have a Turkish rock group. From time to time we have keyboard ensembles. Tutoring is provided on woodwind, brass and percussion through the Disadvantaged Schools Project Funding.

Venue and resources: Music Room.

We have some excellent gear – e.g. 2 drum kits, 2 PA systems (one teacher owned), 4 bass guitars, 4 electric guitars, 20 acoustic guitars, 2 synthesizers, 30 portable keyboards.

Variety of metallophones and xylophones, amplifiers, some untuned percussion. Some of the kids bring in their national instruments eg. Turkish drums etc.

This year we will have 2 Macintosh computers and 2 new model Roland Synthesizers. Space in the class is good. Enough to 'perform'. One classroom has a 'stage' to perform on.

Curriculum: We must follow or interpret the Board's Syllabus, but we make up our own programs from this.

Curriculum ranking of music activities: Syllabus gives equal importance to playing, composing and listening. 1 recorder/instrument playing, 1 movement, 2 notation skills, 3 aural training, 4 improvisation/composition/arranging, 5 singing, 6 listening, 7, music history/musicology, 8 music in society/ in the community.

Class profile: Two classes of the same age – different teachers – 9 Mars and 9 Jupiter.

Music background of the class: Both are mixed ability (so good students help slow student. We like to have a 'helpful' environment – not a competitive one).

The class 9 Mars is elective, i.e. pupils have chosen to study music for 4 x 40 minute periods per week. The same with 9 Jupiter.

9 Mars is taught by me, while 9 Jupiter is taught by my colleague.

We have had our classes throughout the previous year, although some new students began at the beginning of this year. Both classes follow the same program. We are pleased with the interest and attitude of both classes. Some pupils have lessons through D.S.P. – one or two will seek outside tuition.

Music lessons: 4 x 40 minutes per week.

Teaching approach

Teaching philosophy:

Personal ranking of music activities: Actually, I try to give pupils a bit of everything in most lessons.

Teaching method: Rhythm: French time names (but boys are aware of other names or ways of learning);

Pitch: not solfa – boys don't like it – but we do lots of rote on keyboard over and over, and sing with pitches;

Orff – lots of clapping, stamping, finger clicking etc.

A fair mixture of lots of other peoples' ideas, adapted for the boys we teach. We don't necessarily prefer one method over another. ALSO – we encourage boys to always use a sound source to compose especially at early age) as I really feel they find it difficult to 'hear in their heads'.

Evaluation and assessment: Questionnaire, tests and questioning techniques in the classroom.

Preliminary opinion of The Pulse Music Album project material: I wish I had all of the project resources last year when I was teaching Year 12 music. They were doing a unit on Minimalism!

Not create a special place for the projects, but it will substitute another item e.g. fits into Performing Media Unit (replaced a percussion ensemble work with African and Gamelan units from your project).

Project name: African Rhythms

Number of lessons: Began beginning of Term II – about 6 weeks – about 18 periods -

with interruptions! Approximately 8 weeks – we had many interruptions e.g. assemblies, or me at inservices.

Familiarity of material: Yes, similar to beginnings of Jazz e.g. call and response, vocal tone colours, improvisation, blue notes, rhythmic drive.

Objectives: To explore music and culture of Africa and Malaysia

To observe the music and then perform it

To use sound sources in the classroom to compose in African and Malaysian styles.

All objectives were met for Africa. Time ran out and couldn't do Malaysia.

Music skills/activities: Lots of clapping!

Lots of call and response in clapping and speech.

Explore more rhythms in 12/8

Listening, composing, performing.

We observed these in African music then tried to apply these in our performance e.g. 1. 4 note groupings Vs 3 + 2; 2. Vibrato, shouting, call and response, observed 'blue' type notes, slurring, falsetto.

Collaboration/integration: geography – where the country was.

Technology – recordings of minimalist music: *Song from Angola* (teacher's recording played before work); *Amampondo – Skulumayele* (just before composing). The students broke out in native chants – and pretended to be African!

Composing activities –

Sound and symbol: Sound to symbol.

Structure/form: Didn't discuss structure except –

1. phrases of 'question and answer', call and response
2. number of bars in the composition.

Composition pieces/exercises from *The Pulse Music Album* projects: *Fishing* and taped example

Compositions – original: Written by me – words to *Happy Day, Sunny Day*. Written by kids – all percussion and rhythm parts.

Compositions – time take to write: Roughly 3 periods. (The words only took 10 minutes).

Student input: All the time! We chose tone colours similar to those in African music e.g. Iron Bell – best sound was bell part of suspended cymbal. Used Turkish drum (dabruka) for main drum – in one instance bongos. We felt dabruka had a much larger variety of tone colours and was quite resonant. Discussed what rhythms each instrument would play in our class composition.

Composing as an incentive to the students' music learning: They weren't absolutely thrilled but their discussion was on a mature level and discussion of hard concepts e.g. cross rhythm, was fully understood.

Student composition titles: No, not really!

Performance –

Performing from notation, by ear, by memory: A bit of everything – notation the most.

Improvisation: Yes, vocally and with solo drummer.

Conducting: Yes, otherwise it became very difficult, especially when xylophone came in.

Pulse: cowbell is pulse

Technology – sound source and performance process:

Recording takes of *Fishing* -

1. Attempt at *Fishing* – vocals only – attempted AFTER we observed vocal tone colours in *Song from Angola*. Tautiaga Suela is the main singer (I think he comes from Tonga!);
2. Second attempt at *Fishing* so others can have a go;
3. Third attempt, but using ‘Heave ho watch out you fishes’ as an ostinato response;
4. Fishing instrumental – (cowbell is pulse) – first attempt – a bit of a mess! They got out of sync. Especially between the singers and instruments. Notice how they have trouble clapping;
5. *Fishing* 2nd attempt – this really dragged on!
6. *Fishing* 3rd attempt – we decided to use the bell of a suspended cymbal for the ‘iron bell’ as it was more obvious. Deserted this half way through. Noisy aren’t they!
7. *Fishing* again. They were pleased with this one.
8. *Fishing* again – faster.
9. *Fishing* again – still not perfect, but better!

Recording takes of *Marriage* –

1. *Marriage* – class composition – with a higher sounding xylophone. Bass xylophone not available. Bongo used in this one, I think;
2. Slower tempo of same song;
3. Recordings listened to: *Song from Angola*
4. *Mitamba Yalagamba*(sic) *Kumchuzi*

Appraisal, evaluation –

Recording student work: They were interested in hearing their recorded performance. It was useful as they could see if it sounded awful. Also gave turns to other boys on the same piece e.g. *Fishing* – just voices (with turns for leave); *Fishing* – instrumental and vocal; our composition.

Response to the minimalist project – students: Some did, some didn’t.

Response to the minimalist project – teacher: I did – would have liked to have done Malaysia, but ran out of time.

How the project(s) fitted into the music programme: Yes, I had to ‘make room’ for the project. At first I thought to slip it into ‘performing Media’ – a unit of work already programmed. However, this topic took the whole of Term I, so I began ‘African Music’ as a new topic in Term II. Malaysian music was also to be dealt with, but time again ran out.

I still feel the projects can be dealt with within a topic.

Music lessons planned in advance or immediate: I did plan the “outline” of what I wanted and did all stencils prior to beginning the project. I did not realize the African

music would take so long e.g. perfecting the performance, etc. took a few lessons – so I had to be flexible for time.

Minimalist projects outside the music classroom: Not able to work with the projects outside the classroom, however, the Malaysian project can be used at our musicale evening with a girls' school (the girls' school is our 'sister' school) as they have an Asian dance group – I'll have to investigate this more.

Options from *The Pulse Music Album* projects: No.

Ability to achieve a balance between various music activities and concepts: Harmony I did not work with. However the following concepts were covered through performance, composition, listening and aural: 12/8, and various note groups, pitch bending and slurring in melody, rhythmic layers and textures, cross rhythm, tone colour of voices and instruments, improvisation.

Role of the cassette player: We used it EVERY SINGLE lesson! for the project – either recording or listening.

I used tape recorders frequently for my own use as well, especially for listening.

It was useful for the kids to hear how they sound.

Student reaction to minimalist excerpts on the kit's cassette tape: The excerpts were useful for observation of style and aural (free response and a rhythm dictation). They also could discuss characteristics of the excerpts.

The album of projects –

The projects as a sequential programme: It can work as a sequential package. It is up to the teacher which order to put them in e.g.:

1. Comparative e.g. a look at African, then how these characteristics are put to use by modern composers;
2. From a compositional/performance angle and look at all projects. Useful for contemporary studies;
3. A look at say "rhythm" (or any element e.g. texture, melody) and compare African, Malaysian, minimalist etc.

Age group suited to the projects: Younger – primary age, Yr. 7 and Yr. 8, and beginning senior students:

1. Phase shifting – making simple rhythms and can also make a 'game' of it too;
2. Add and subtract

The African Music (particularly cross rhythms) Yr. 9 upwards – this was quite hard, but possible. A lot of awareness by teacher is important.

Strengths and weaknesses of the projects:

1. Some of the directions can be made more clearer;
2. It would have been fantastic if you had included rock influenced work e.g.
 - a) Jean Michael Jarre – 'Diva' from the Zoolook Album;
 - b) 'Merry Xmas Mr. Lawrence' – David Bowie and the minimalistic type characteristics influencing modern rock. (I have these if you wish to have a copy).

On the whole, I think the projects are valuable; but the African one was more time consuming than I thought at first. It's a very large project (the whole Pulse Music).

Composition associated with Teacher No. 76 written in response to the African Rhythms project

76.1

Page 1

Page 2

COMPOSING - AFRICAN STYLE

Here is a set of words for you to make up a rhythm to. The time signature is $\frac{12}{8}$. The words have already been separated into syllables. Write the rhythm above the words.

side Marriage | chane

Hap-py day, sun-ny day

Ce-le-brate mar-riage

Young-est one, pret-ty one, pret-ty one, pret-ty one

Mar-ries her sweet-heart

Bless she!

Bless he!

Hap-py day, sun-ny day

Ce-le-brate mar-riage!

12
8 means 12 quarter beats per bar, but with 4 big beats of dotted crotchets. eg $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$

AFRICAN COMPOSITION

We will now put our African rhythms to our song. We can use ideas from 'Aiding' and add some of our ideas. Some things to remember:

- 1) The role of each instrument
- 2) Use of polyrhythm
- 3) layers of rhythmic contrast

our composition!

There are a variety of note groupings in $\frac{12}{8}$

eg $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$

$\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$

$\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$ $\frac{12}{8}$

THE BAND

DRUMS

KIDU

KREBU

BIX

CLAPS

VOICES

(Solo) Hap-py day, Sun-ny Day. (Solo) Hap-py Day, Sun-ny Day

UNRECORDED DEMO.

The class suggested the rhythms

We used the debonka (African Drum) for the Improved Drum (Soy) in one using bongos. We felt Debonka had a much larger variety of rhythms.

1.	composed by teacher and the class	6.	dotted crotchet = c. 51
2.	performed with voices and untuned percussion	7.	score written by teacher
3.	two takes – the first faster than the second	8.	two takes at different tempo; inaccuracies in rhythmic layers; recording distorted
4.	playing time 2 mins 10 secs	9.	CD for Appendix 8 Track 18
5.	development of time and cultural context		

Teacher No. 89

Teacher profile No. 89: female music teacher in a private secondary girls' school in Sydney, Australia - 15 year old age group

Identification

Teacher: No. 89 – music teacher, private primary/secondary school

Gender: female

Study age group: 15 years

School location: Sydney, NSW

<p>Study project(s): Phase Shifting, Phase Shifting Melodies, Add and Subtract. Study timing: February – July 1990 – I spent approximately 9-10 lessons on it i.e. one school term. Scores and transcriptions: 89.1 – 89.17 Recording(s): CD 8 Tracks 19-21</p>	
<p>Education, preference, experience</p>	
<p>Qualifications: Dip. Mus. Ed; Cert. Dalcroze Eurhythmics.</p>	
<p>Preferences (experience) – Music Activities: Play an instrument Sing Write/arrange music Dance Listen to music Read books on music Produce plays/musicals</p>	<p>Preferences (experience) - Musical styles: Western Classical music pre-20thC Western Classical music 20thC Pop/rock Jazz Musicals Minimal music Some New Age music – (Andreas Vollenweider) Middle of the road music Some music of other cultures - German, Portuguese/Brazilian (Latin American) Church music - choral</p>
<p>Years of teaching experience: 9 and a half years Years of teaching in this school and ages taught: 9 and a half years in this school teaching years 7 – 12 (12 to 16/17 years old). Years of experience teaching the age group of the study: four or five years. Experience teaching twentieth century art music styles: It is part of the Year 12 HSC syllabus. It is a compulsory topic! With Year 12 this year I have covered Impressionism, Expressionism, Aleatoric music, electronic and mixed media works, serialism/12 tone row, Nationalism, Neo-classicism (Neo-romanticism), minimalism/pointillism, Australian 20thC works. Schoenberg, Stravinsky, Stockhausen - even more recently also Peter Sculthorpe, Moya Henderson, Miriam Hyde, Anne Boyd. We have looked at music (i.e. score reading/listening and analysis) by Debussy, Ravel, Schoenberg, Berg, Webern, Stravinsky, Bartok, Cage, Penderecki, Stockhausen, Berio, Riley, Reich, Britten Prokofiev, Peter Maxwell-Davies. Experience teaching music of other cultures: Indonesian music for Year 7 and 8 musical appreciation. Philippine music – bamboo stick ‘tinikling’ dances. This is usually enjoyed by Years 7 and 8.</p>	
<p>Teaching environment</p>	
<p>School - School situation: Sydney, NSW Public or private: private How long has the school been open: 80 years Level: Year 9 Elective music</p>	

Number of students: 700 – primary and secondary combined

Socio-economic background of parents: middle/upper middle class

General information about the school: Many students learn instruments.

School's interest in music: Strong. Many extra-curricular groups – choir, orchestra, madrigal group, folk group, flute choir, wind ensemble; concerts; combined school music festivals; Eisteddfods; community work.

Venue and resources: Music room. Adequate instruments, cassette/record player, CD player.

Adequate scores, recordings. Reasonably well-equipped. More space is necessary.

Curriculum: a mixture of state, school, national.

Curriculum ranking of music activities: Instrument playing, singing, notation skills, aural training, improvisation/composition/arranging – approximately equal amounts. Listening, music history/musicology, music in society/in the community – a variety of each every week. Lack of room for movement.

Class –

Class age: 13 – 14 years – average age 14

Gender of class: 5 females

Class profile: Mixed ability.

Music background of the class: General music in Years 7 and 8. Elective music in Year 9. All students learn an instrument and study musicianship from 2nd grade – 8th grade.

Aural training, melody and harmony composition, history and listening are continually being studied in class. Performance at school concerts, Eisteddfods, etc. Each student is also involved in at least one extra-curricular activity.

Music lessons: 5 x 40 minute lessons per week.

Teaching approach -

Teaching philosophy: I believe that all children should have the opportunity to be able to learn to read and write music just as they learn to speak English.

Music is present in many aspects of life as well as being an important aspect of being creative and bringing out emotions and a person's inner self. It is a form of self-expression; a way of showing and using talent. Music can be healing; it can reflect society; it can be used to communicate. I feel that every child should be given the chance to experience this.

Personal ranking of music activities: same as for the music curriculum.

Pitch terminology and systems: sight singing/ playing xylophones etc. Pitch-stories, games. Computer programmes – note naming drill etc. some sol- fa.

Harmony – listening to chords/ chord changes – I use a guitar or piano. Aural first then written.

Rhythmic terminology and systems: Echo clapping/ canon clapping – French time names.

Evaluation and assessment: By choice. Tests/quizzes, performance in class, compositions performed and marked, essays written, aural tests, sightsinging.

Preliminary opinion of The Pulse Music Album project material: They will fit into

the composition area.

Project name: Phase Shifting

Number of lessons: 4

Familiarity of material: not familiar

Objectives:

- reinforce rhythms
- new organisational techniques using known rhythms/pitch
- melodic motives
- new style of music – 20thC techniques.
- Gamelan orchestral sounds – linked to Indonesian music.

Music skills/activities: learning new notes on recorders; using crossing two xylophone sticks; singing one apart alone – individuals holding their own individual parts.

Integration: Indonesian studies – some students recognized the ‘gamelan’ sound.

Technology – recordings of minimalist music: Reich *Clapping Music*; listening [to] *Rainbow in Curved Air* by Riley.

Composing activities –

Sound and symbol: The students wrote it down first and then performed it.

Structure/form: Not discussed.

Composition pieces/exercises from *The Pulse Music Album* projects: Yes

Compositions – original: By the students

Compositions – time take to write: This took a lesson to write and perform

Student input: They suggested to not repeat bars too often. They didn’t like too much repetition.

Composing as an incentive to the students’ music learning: They found it simple but enjoyed performing it on percussion instruments/voices.

Student composition titles: No titles.

Performance –

Performing from notation, by ear, by memory: From notation/by ear. Easy sections were memorized.

Conducting: Counted them in. Child conducted at times. Tended to accel. Without counting or conducting.

Pulse: Slower pulse easier to follow and hear.

Technology – sound source: After the music was written by the class we listened to Option B. They found it too repetitive.

Appraisal, evaluation –

Recording student work: They were critical of the sound of various combinations of instruments, dynamics, keeping in time etc.

Response to the minimalist project – students: Yes they did enjoy the project.

Student comments – “Rhythm phase shifting – this was interesting and sounded good. It was quite hard to keep the rhythm of the phase shifting parts when other people around

you were doing different parts”. “Rhythm phase shifting – sounded good but was very hard to keep in time. It was a bit repetitive”. “I agree! This was good because you only had to think of one rhythm and then it was easy to mix it up properly”.

Response to the minimalist project – teacher: I found it a little repetitive and much time, I felt, was wasted.

Project name: Phase Shifting Melodies

Number of lessons: 2 – three weeks apart

Familiarity of material: Phase Shifting Melodies – not something I’ve done before. But motives – I use a lot.

Objectives:

To find motivic fragments in large scores (overture, symphony etc).

To break down melodies into smaller motivic fragments (also from large scores) [leading to] structure of melodic phrases.

Composing original motives, building original compositions on motives.

Music skills/activities: Score reading – ‘Hebrides’ Overture – Mendelssohn; ‘Trout’ Quintet – Schubert; ‘Symphonie Fantastique’ – Berlioz. Aural work – rhythmic and melodic motives.

Sight singing from the Pulse Music Book

Improvising descants (singing)

Xylophone – improvisation, crossing sticks.

Technology – recordings of minimalist music: Not played.

Composing activities –

Sound and symbol: Notes first – played from notation but usually memorized it very quickly.

Composition pieces/exercises from *The Pulse Music Album* projects: Yes.

Compositions – original: Students.

Compositions – time taken to write: 30 minutes out of a 40 minute period – not always enough time to record everyone’s work.

Student input: They felt it was too repetitious and wanted to write melodic phrases of longer length.

Variations on the tunes were improvised and then some were notated.

Composing as an incentive to the students’ music learning: It was so different to what they had previously done that they actually preferred to compose in the way they knew best how to. They enjoyed playing on instruments – performance, but they found it too repetitious when writing it.

Student composition titles: No.

Performance –

Performing from notation, by ear, by memory: Firstly from notation. Then it was memorized. Improvisation by ear, not notated.

Improvisation: Yes – vocal and instrumental, to harmonise the tunes either give or original tunes by the students.

Appraisal, evaluation –

Recording students' works: Yes. They enjoyed listening back and felt it needed much more rehearsal time which I feel, we did not have time to spend on.

Response to the minimalist project – students: “Phase shifting melodic – hard to keep in time – easy to write. It sounded interesting when each bar was repeated about 2 times. It got too monotonous when the bar was repeated more than 4 times”.

“Was easy to write but hard to play. Repeating the bar too many times got boring”.

“As above – I agree with it”.

“I agree too!”

Response to the minimalist project – teacher: positive.

Project name: Add and Subtract

Number of lessons: 2

Familiarity of material: Not familiar.

Objectives:

Time signature changes.

Reinforce rhythmic dictations in 2/4, 3/4, 4/4, 3/8, 6/8 and look at 5/8, 7/8, 2/2 etc.

Music skills/activities: Listening to music with meter changes.

Looking at scores with meter changes.

Technology – recordings of minimalist music: No. We listened to some Stravinsky with meter changes (Petrushka etc).

Composing activities –

Sound and symbol: Symbol to sound. They did tend to prefer to compose on paper and then perform it.

Composition pieces/exercises from *The Pulse Music Album* projects:

Compositions – original: The students composed their own pieces.

Compositions – time take to write: In 1 lesson.

Student input: No. They found it a bit confusing.

Students wrote variations on Picket Fences instead of repeating the bars 6 times.

Composing as an incentive to the students' music learning: Yes. They enjoyed the rhythmic outcome by adding and subtracting.

Student composition titles: No.

Performance –

Performing from notation, by ear, by memory: From notation.

Improvisation: Yes – clapping rhythms – changing meters. (Accenting the first beat of the bars – time signature changes occur).

Conducting: Conducted by me/and or students. The students found this one a little more difficult to keep in time.

Appraisal, evaluation –

Recording student work: (Not enough time). We did end up recording ‘Picket Fences’.

Response to the minimalist project – students: “Add and Subtract was interesting but hard to concentrate on the timing”.

“Add and Subtract was harder to write than phase shifting, and it sounded good if it was done properly”.

“Add and Subtract sounded good, but was quite hard to write”.

“The result sounded very good and was very easy to construct”.

Response to the minimalist project – teacher: It was enjoyable.

How the project(s) fitted into the music programme: Yes, I did ‘make room’ to incorporate it. It was a good opportunity for something new and different and also it forced us to perform more than we usually do.

Music lessons planned in advance or immediate: I worked from one week to the next.

Minimalist projects outside the classroom: No.

Options from *The Pulse Music Album* projects: I used option A ‘Fast and Gossipy’ for fun – to open a lesson. Option B on recorders and other instruments. These two were fun to play.

Ability to achieve a balance between various music activities and concepts: Harmony – I did not use much with the projects, but I certainly could and did incorporate them with singing, rhythmic, pitch and instrumental work.

Role of the cassette player: Recording performances is always a good thing. Our performances, however, were all very rushed and the quality of the cassette player was not the best.

Student reaction to minimalist excerpts on the kit’s cassette tape: The ones I used (6 Pianos; Music in 12 Parts; Gamelan music) were not really enjoyed. One person liked the gamelan music. None of them liked the repetition (Interesting because they like rock music which is full of repetition! But I suppose the performing media and the overall sound plays a large part here).

The album of projects –

The projects as a sequential programme: I don’t really think the projects would work sequentially. The interest waned after a few sequential lessons so I left time in between. It was enjoyed far more if done once a week or once a fortnight.

Age group suited to the projects: Phase shifting – younger students. Harmonic prisms – older students.

Strengths and weaknesses of the projects: The students looked forward to the lessons but during the lessons often commented on the amount of repetition. They tended to want to limit the repeats and preferred to vary the music.

The projects were interesting but it seemed to take a long time to write and perform pieces – longer than I give a conventional harmony or melody writing exercise, mainly I suppose because it was something different.

The styles or projects were very similar. The students found it difficult to tell them apart so I wouldn’t teach them one after another or even each week. I think they would be better used on occasion to tie in with some topic being studied.

I was planning on doing some of the gamelan work but on listening to the cassette for the questionnaire, the majority of students really didn’t enjoy that style, so I decided against it.

The actual composing and performing was most certainly fun for the class but listening to this type of music was not at all enjoyed. I don't feel it was appealing to year 9s (or year 12 who I've done some Reich and Riley with) except for one student who composed in this style herself.

Teacher's response to minimalist project material: The class and I found this sort of music a little too monotonous and not as lyrical as we are used to using/composing/listening to.

However, the add and subtract was fun and I would use some ideas from the projects again if they fitted exactly into what I was already doing.

Students' response to minimalist project material: They enjoyed the melodic phase shifting and the add and subtract projects most – it gave them more variety in pitch and rhythm to be creative.

They disliked 'Prisms' which I started but did not persevere with (although one student came out with a short composition – very similar in sound to 'Rite of Spring', 'Dance of the Adolescents' by Stravinsky!).

One student stated she'd never written stuff like that before – it loosened up the composition in her class.

Compositions associated with Teacher No. 89 written in response to the Phase Shifting project

89.1 (Phase Shifting – rhythm only), 89.2 (Phase Shifting – melody), 89.3 (Add and Subtract)

Phase Shifting - Rhythmic

The image shows a handwritten musical score titled "Phase Shifting - Rhythmic". It consists of three parts:

- 89.1:** Labeled "89-1", it features two staves. The top staff is for "eg" (egg) and the bottom staff is for "triangle". The rhythm is written in a 4/4 time signature.
- 89.2:** Labeled "89-2 Phase Shifting - Melodic", it features two staves. The top staff is for "xylophone" and the bottom staff is for "metalophone". The melody is written in a 4/4 time signature with various rhythmic values and repeat signs.
- 89.3:** Labeled "89-3 x 2 Add and Subtract", it features a single staff. The rhythm is written in a 4/4 time signature with various rhythmic values and repeat signs.

89.1

1.	composed by female student No. 1	4.	not all phase rotations are written down; irregular number of repeats
2.	written for tambourine and triangle	5.	score written by student
3.	development of construction		

89.2

1.	composed by female student No. 1	3.	irregular number of repeats
2.	score written by student	4.	written for xylophone and metallophone

89.3

1.	composed by female student No. 1	3.	no repeats
2.	score written by student	4.	no instrumentation given

89.4 (Phase Shifting – rhythm), 89.5 (Phase Shifting – melody), 89.6 (Add and Subtract)

PHASE SHIFTING – RHYTHM

89.4

For this score we used Triangle, Tambour, Finger Cymbals, Tambourine, Tapping Sticks.

89.5 PHASE SHIFTING MELODIE

Xylophone
Metallophone

89.6 ADD AND SUBTRACT

89.4

1.	composed by female student No. 2	4.	irregular number of repetitions for each cell; rotation sometimes at quaver values, sometimes at crotchet values
2.	score written by student	5.	written for triangle, tambour, finger cymbals, tambourine and tapping sticks
3.	development of construction		

89.5

1.	composed by female student No. 2	4.	rotation sometimes at quaver values, sometimes at crotchet values
2.	score written by student	5.	written for xylophone and metallophone
3.	development of construction		

89.6

1.	composed by female student No. 2	3.	no repeats
2.	score written by student	4.	no instrumentation given

89.7 (Phase Shifting – rhythm), 89.8 (Phase Shifting – melody), 89.9 (Add and Subtract)

Phase Shifting - Rhythmic

①

89.7

②

For both we used: tambour
- triangle
- finger cymbals
- tambourines
- tapping sticks

89.8

Phase Shifting - Melody

89.9 Add and Subtract

89.7

1.	composed by female student No. 3	3.	irregular number of repeats for each cell
2.	score written by student	4.	tambour, triangle, finger cymbals, tambourines, tapping sticks

89.8

1.	composed by female student No. 3	3.	cells played twice
2.	score written by student	4.	tambour, triangle, finger cymbals, tambourines, tapping sticks

89.9

1.	composed by female student No. 3	3.	no instrumentation given
2.	score written by student		

89.10 (Phase Shifting – rhythm), 89.11 (Phase Shifting – melody), 89.12 (Add and Subtract)

① PHASE SHIFTING - RHYTHM:
 eg 4/4 ||: ♩ ♩ ♩ ♩ ||

89.10
 my own - 4/4 ||: ♩ ♩ ♩ ♩ ||: ♩ ♩ ♩ ♩ ||: ♩ ♩ ♩ ♩ ||: ♩ ♩ ♩ ♩ ||: ♩ ♩ ♩ ♩ ||

For Both we used - triangle, Tambour, finger cymbals, Tambourine tapping sticks.

89.11

② PHASE SHIFTING - MELODIC

To be played on xylophone, metallophone

③ ADD AND SUBTRACT
 89.12

89.10

1.	composed by female student No. 4	4.	irregular number of repeats for each cell
2.	score written by student	5.	tambour, triangle, finger cymbals, tambourines, tapping sticks
3.	development of construction		

89.11

1.	composed by female student No. 4	4.	irregular number of repeats for each cell
2.	score written by student	5.	xylophone and metallophone
3.	development of construction		

89.12

1.	composed by female student No. 4	3.	no repeats
2.	score written by student	4.	no instrumentation given

89.13 (Phase Shifting – rhythm), 89.14 (Phase Shifting – melody), 89.15 (Add and Subtract)

1. Phase Shifting – Rhythmic

89.13

89.14 2. Phase Shifting – Melodic

89.15 ADD AND SUBTRACT

89.13

1.	composed by female student No. 5	6.	crotchet – c.76
2.	finger cymbals and tapping sticks in score but played on triangle and maracas	7.	score written by student
3.	irregular number of repeats for each cell	8.	first of two performances with different instrumentation – strong pulse, some inaccuracies
4.	development of construction and time	9.	CD for Appendix 8 Track 19
5.	playing time 15 secs		

89.14

1.	composed by female student No. 5	4.	each cell repeated twice
2.	score written by student	5.	xylophone and metallophone
3.	development of time		

89.15

1.	composed by female student No. 5	3.	no repeats
2.	score written by student	4.	no instrumentation given

89.16

3 chords: $\sharp C$ $\sharp F$ $\sharp C$

Handwritten musical score for marimba, showing four systems of staves. The first system indicates three chords: $\sharp C$, $\sharp F$, and $\sharp C$. The second system features a complex rhythmic pattern with dynamics markings *sf*, *sf*, *sf*, *sf*, and *pp*. The third system continues the rhythmic pattern with *sf* markings. The fourth system shows a pedal section with an arrow pointing right and a note held with a pedal to fade.

1.	composed by female student No. 5	5.	one take of opening – 6 secs
2.	performed on marimba	6.	score written by student
3.	through-composed	7.	excerpt played and recorded - accurate
4.	expansion of structure, construction, pitch and dynamics	8.	CD for Appendix 8 Track 20

Teacher No. 98

Profile of Teacher No. 98: male music teacher in a selective public secondary boys' school in Sydney, Australia – (12 and) 15 year age groups

Identification

Teacher: No. 98 – music teacher, selective boys' secondary school

Gender: male

Study age group: (12 and) 15 years

School location: Sydney, NSW

Study project(s):

Phase Shifting, Harmonic Prisms, Canon – 15 year age group

Study timing: February to June 1990

Scores and transcriptions: 98.6 to 98.36

Recording(s): CD 8 Tracks 22-28

Education, preference, experience

Years of experience teaching the age group of the study:

<p>9 elective – mixed – some just this year, others for two and a half years.</p> <p>Experience teaching twentieth century art music styles: Avante-garde – musicology with year 10.</p> <p>Experience teaching music of other cultures: Philippines, Japan, India – musicology.</p>
<p>Teaching environment</p>
<p>Class –</p> <p>Class age: 9 elective 14-15 years, average age 15 years - 15 year old study group;</p> <p>Gender of class: 9 elective has 14 male students</p> <p>Class level: 9 elective</p> <p>Class mix: 9 elective – again mixed ability, some extremely gifted in all aspects of music ability- one or two gifted academically, poor practically</p> <p>Music background of the class: 9 elective – all play instruments ranging in ability from 8th grade to A.Mus violin to elementary piano – 4 part vocal harmony – aural skills above the average – 4 class members very highly skilled.</p> <p>Number of music lessons for project class per week: 9 elective – three</p> <p>Length of lesson: 53 minutes</p>
<p>Approach and strategies adopted to introduce material from <i>The Pulse Music Album</i></p>
<p>Project name: Phase Shifting – February 1990. Year 9 (third year elective music secondary school class) 15 year study age group.</p> <p>Number of lessons: Difficult to gauge because of interruptions – possibly two a cycle.</p> <p>Familiarity of material: Unfamiliar!</p> <p>Objectives: None really. Exposure, enjoyment and fun, use it as a compositional device.</p> <p>Music skills/activities: Used some of the motives as melodic dictations.</p> <p>Composing activities –</p> <p>Sound and symbol: They always write notes first then play.</p> <p>Composition pieces/exercises from <i>The Pulse Music Album</i> projects: A mixture of sources.</p> <p>Compositions – original: yes</p> <p>Compositions – time take to write: a period</p> <p>Student input: Instruments used on whim or suggested by the class e.g. cello, bassoon etc..</p> <p>Composing as an incentive to the students’ music learning: No, not really an incentive – a stimulus perhaps.</p> <p>Student composition titles: Sometimes.</p> <p>Performance –</p> <p>Performing from notation, by ear, by memory: Playing initially from notation, then memory.</p> <p>Appraisal, evaluation –</p> <p>Recording student work: This class enjoys the frolic of playing anybody’s composition, and then usually gives it a mark voluntarily and discuss quite ad hoc.</p>

Response to the minimalist project – students: Initially they thought it trite, however changed their minds after they realised the control required. Nothing on the tape has been rehearsed mostly what you hear is the first or second playing. “We’re not doing this again.” “This is tedious!” “Boring!” “Can we do some real music?”

Response to the minimalist project – teacher: Yes, I enjoyed the material.

Project name: Harmonic Prisms – April, May 1990. Year 9 (third year elective music secondary school class) 15 year study age group.

Number of lessons: 6 – 8 lessons

Familiarity of material: Unfamiliar.

Objectives: I wanted to use this unit as an incentive to create their own compositions basically because I thought the project was interesting.

Music skills/activities: We employed movement. One composition employed a walk around the room in given pattern. The reader instigated body movements according to what was being read.

Composing activities –

Sound and symbol: From symbol to sound, rarely the reverse.

Discussion of structure/form: Not really any discussion. They made their own observations.

Composition pieces/exercises from *The Pulse Music Album* projects: Yes

Compositions – original: Yes – the children.

Compositions – time take to write: Varied according to task. Some a period, some a little longer.

Student input: None, and that was probably my fault.

Composing as an incentive to the students’ music learning: Yes, however as you will see by the examples they wandered from the guide-lines set.

Student composition titles: Yes.

Performance –

Performing from notation, by ear, by memory: Notation, then memory.

Improvisation: Improvisation with glochs. However it tended to fall apart because of the hilarity in the room. They enjoyed what they were doing however lacked discipline to follow it through. Ad hoc lesson.

Conducting: At times I conducted. At times they conducted themselves. Basically I don’t think they had trouble following the pulse. I think the tape answers the question.

Appraisal, evaluation –

Recording student work: Yes, the work was recorded. Quite hilarious at times as you will hear. Very useful. They enjoyed hearing each other on tape. No time given much to retaping, what you hear is what you get.

Response to the minimalist project – students: They enjoyed working on the project, however no comments offered. They seemed to revel in it!

Response to the minimalist project – teacher: Yes, and great fun.

Project name: Canon – two weeks in June. Year 9 (third year elective music secondary school class) 15 year study age group.

Number of lessons: 4 to 5 lessons.

Familiarity of material: Familiar. Baroque period in particular Baroque compositional devices, how they are employed etc.

Objectives: None really. I thought it was rather a novel way of introducing, exposing them to ‘Canons’.

Music skills/activities: Listened to Pachelbel’s *Canon*.

Composing activities –

Sound and symbol: Symbol to sound

Compositions – original: yes

Compositions – time take to write: Generally only a period was given.

Student input: Pupils brought in canons from their own collections.

Composing as an incentive to the students’ music learning: I don’t think that in this instance it was, because we have done a similar venture before.

Performance –

Performing from notation, by ear, by memory: refer to before.

Appraisal, evaluation –

Recording student work: Again, we ran out of time here to record all compositions, in fact I don’t think we recorded any canons.

Response to the minimalist project – teacher: Yes I enjoyed working with this project, however with the hectic pace in this school we seemed to lose impetus!

Compositions associated with Teacher No. 98 written in response to the Phase Shifting Melodies project

98.6 *Joy on a Rainy Day*

Joy on a Rainy Day

The musical score for 'Joy on a Rainy Day' is written for recorder and xylophone. It consists of two staves. The top staff is for the recorder, marked 'x3', and the bottom staff is for the xylophone, marked 'x4'. The music is in 2/4 time. The recorder part starts with a first bar marked '(last bar)' and continues with a series of eighth and sixteenth notes. The xylophone part consists of a few notes in the first few bars, followed by rests.

1.	composed by male student	6.	dotted crotchet = c. 86
2.	performed with recorder and xylophone	7.	score transcribed by researcher
3.	First bar of upper part used as last bar	8.	one take – accurate, effective performance
4.	development of structure and pitch (mode)	9.	CD for Appendix 8 Track 22
5.	playing time 35 secs		

98.7

1.	composed by male student	6.	dotted crotchet = c. 80
2.	performed by metallophones	7.	score transcribed by researcher
3.	4 bar phrase and 3 bar phrase	8.	one take - insufficient repetitions to complete phasing cycle – accurate, effective performance
4.	development of structure and pitch (mode)	9.	CD for Appendix 8 Track 23
5.	playing time 25 secs		

Compositions associated with Teacher No. 98 written in response to the Harmonic Prisms project

98.8 *Reflections of a Mournful Triangle*

Reflections of a Mournful Triangle

1.	composed by male student	6.	crotchet = c. 60
2.	performed on clarinet, violin, xylophone (?), triangle	7.	score transcribed by researcher
3.	uneven number of repetitions	8.	one take – accurate and mournful
4.	development of instrumentation	9.	CD for Appendix 8 Track 24
5.	playing time 1 min 15 secs		

98.9 *Experimental Thing*

Experimental Thing

1.	composed by male student	5.	crotchet = c. 88
2.	performed on recorder and metallophones	6.	score transcribed by researcher
3.	pastiche	7.	one take - some rhythmic inconsistencies
4.	playing time 54 secs	8.	CD for Appendix 8 Track 25

98.9 *Galloping Horses*

1.	composed by male student	3.	score written by student composer – pale, partly illegible manuscript
2.	written for cymbal and two or three melodic instruments	4.	each cell repeated 4 times

98.11

1.	composed by male student	4.	score written by student composer
2.	cymbal and unspecified melodic instruments	5.	no repeats specified in score
3.	development of articulation		

98.12

1.	composed by male student	4.	score written by student composer
2.	flute, oboe, violin and cymbal	5.	no repeats specified in score
3.	development of time		

98.13 *The Clock* (also titled "The End")

Harmonic Prisms "The End"

The clock ticked as the house around it fell. The clock ticked as the Earth cracked and crumbled. The thunder rolled as the massive cyclone enveloped the planet. Yet the clock still ticked. Lava spilt from the slowly disintegrating ground. But the clock ticked on.

The stars above began to explode with great fury. But the clock ticked on.

The sun caved in on itself!
SPRUNNING!!!

The seemed to have stopped. A spring must have broken!
The Earth was sucked into the black hole, that the sun had become. The universe raged with ultimate destruction. The pressure built up, and up, and up, and up, and up, and up, and up, and up, and up, and up, and up, and up, and up, and up, until there was an almighty explosion.
BOOM! SMASH! ROAR! CRASH!

The great universe collapsed in upon itself with such power and fury that the sky was filled with bubbling, frothing rage and wrath.

And then there was silence.

And from this silence, came the lone, solitary chimes of a clock.

The image shows a handwritten musical score for 'The Clock'. It consists of several staves of music. The top part of the score is written in a clear, legible hand, while the bottom part is more scribbled and less legible. The score includes various musical notations such as notes, rests, and dynamic markings like 'pp' (pianissimo) and 'cresc.' (crescendo). There are also some annotations in the margins, such as 'Append Bar 10 1 1/2' and 'Cymbal Pattern'.

1.	composed by male student	6.	crotchet = c. 77
2.	performed on piano, xylophone, metallophone and cymbal	7.	score written by student composer. Two versions of the score submitted, one a rougher copy, the other (see above) clearly written.
3.	one take. Repetition of each cell not specified in score but between 6-8 times in performance. Last bar to be repeated 3 times according to score, but repeated 6 times in performance.	8.	template of the chords underlying the piece written out at the bottom of the page
4.	expansion of texture	9.	evocative, accurate performance
5.	playing time 1 min 50 secs	10.	CD for Appendix 8 Track 26

98.14 Rebirth

Page 1

Series of chords used

Rebirth words and music by

Handwritten musical score for Page 1. It includes a series of chords at the top, followed by a vocal line and piano accompaniment. The score is written in a standard musical notation with treble and bass clefs.

Page 2

Page 3

Handwritten musical score for Page 2, continuing the composition from Page 1. It features a vocal line and piano accompaniment.

Rebirth-Narration

Words and music by Michael

"The sun spread a light on the world for the last time. The human race was about to vanish. With a silent explosion, earth was gone!"

"The one thing that with beautiful memory got filled with me and hatred had vanished?" "Why?"

"Pain, murder, disease.... the list goes on and on. There was many reasons why the planet was destroyed. Since the dawn age, the human race had just celebrated its own. There was nothing left but a night for one who will be no more."

"The planets of an other system gazed at the loss of their 'perfect' sister."

(Pause in narration)

"It was only a few thousand years before a new planet began to evolve. The creature who lived there was a peaceful, highly creative and intelligent race of little beasts who were never once known to be in contact with the famous occupants of the site!"

"The new planet however did begin to evolve and the creature learnt to enjoy life!"

1.	composed by male student	6.	crotchet = c. 86
2.	performed on piano, metallophone and cymbal	7.	score written by student composer.
3.	one take. Repetition of each cell not specified in score but first 4 cells repeated 8 times, and next 5 cells repeated 4 times in performance.	8.	template of the chords underlying the piece written out at the top of the first page
4.	expansion of structure	9.	effective, accurate performance
5.	playing time 3 mins	10.	CD for Appendix 8 Track 27

98.15 *Insanity for the Insane*

Page 1

the Chords

chord Prisms

xylophone

violin

piano

The image shows a handwritten musical score for the piece 'Insanity for the Insane'. At the top, there are ten chord diagrams, each consisting of a circle with notes and accidentals (sharps, flats, naturals) placed around it. Below these is the title 'the Chords' and the subtitle 'chord Prisms'. The score is divided into two systems. The first system has three staves: xylophone, violin, and piano. The xylophone part consists of rhythmic patterns of vertical lines. The violin part has a melodic line with eighth notes. The piano part has a bass line with chords and notes. The second system continues the xylophone, violin, and piano parts. The xylophone part has four measures of rhythmic patterns. The violin part has four measures of melodic lines. The piano part has four measures of chords and notes. The score is written in a simple, hand-drawn style.

Page 2

Hallo. My name is Mr. Kaputnick, and I would like to make an appeal for insanity. You may not realize it, but, there are many people in this world who, through no fault of their own, are completely sane. Some are born sane, some become so later in their lives. It is important for us more fortunate citizens to do all we can to try and aide these people, and bring them back to a state of mental ill health. You can start off with small things, like "ping-pong ball eye balls and amputated. then you can paste chicken feathers all over your self, then you can have trouble following the plot of the "Dukes of Hazard." then you cannot be repulsed by the sight of Mr. Jurd. then you can start machine-gunning, and then you can spread toffee all

Page 3

over your face, then you can paint half of your body red, and the other half green, and try to swim in the toilet, then you can jump up and down in a bowl of treacle, screaming "squak! Squwak!" then you can go "EER AIA OH! EER AIA OH!" then you can swallow battery acid, and roll around on the floor, going "patting! patting! patting!" then you can charge around the streets, staked, telling all that you are from the planet APPLER. And finally crawl under a park bench frothing at the mouth, and expire. thank you.

1.	composed by male student	6.	quaver = c. 84
2.	performed on xylophone, violin and piano	7.	score written by student composer.
3.	one take. Repetition of each cell not specified in score but in performance each cell repeated eight times.	8.	template of the chords underlying the piece written out at the top of the first page. Pale, partly illegible photocopy
4.	development of rhythm, harmony and dynamics	9.	effective narration, some performance inaccuracies
5.	playing time 2 mins 22 secs	10.	CD for Appendix 8 Track 28

98.16 *Shepherd's Prism*

Page 1

Page 2

Page 3

Harmonic Prism - Shepherd's Prism

There was once a shepherd who tended a flock of sheep. He was young and lively. His sheep were healthy and obedient. He lived on his to live far and with his sheep.

One day he went to town one day for his food. He went into the inn and while he waited he saw a young warrior. The young warrior gave him a cold hard stare and left.

Two years after the encounter, they met again, except this time the warrior had killed one of his sheep and had thrown the carcass onto his front doorstep.

Another two years had passed before they met again. This time the warrior was carried into the house on a stretcher with grave. The shepherd told his wife to treat the warrior.

It was fifteen years before they met again, this time it was to take the shepherd's eldest son to war. The son was taken from the shepherd by the warrior with a fierce look on his face. Two months had passed before the shepherd received a message informing him his son was killed in battle.

Yet another fifteen years had passed before they met again. This time the shepherd was walking along his outer boundaries when he saw the warrior being attacked by barbarians. He called his sons and they ran to the aid of the warrior. The shepherd's sons hesitated as they thought of what the warrior had done to their family, but the shepherd called out:-

To live is to not hold back and hate
To hold back and hate is to die!

1.	composed by male student	4.	score written by student composer
2.	instrumentation not specified	5.	template of the chords underlying the piece written out at the top of the first page. Pale, partly illegible photocopy in parts
3.	development of rhythm		

98.17 *The Wicked Old Man*

Introduction - The wicked old man

In a little old country town, there was a wicked old man. The kids would play a game. The ball rolled towards the old. He picked it up and threw way over the field into one of the nearby backyards. "No touch those chicky little birds" he just sat on the bench waiting for something to happen. The kids ran around and crying out for "mummy! mummy!" that old man had a new hat. The old man just sneezed, picked up his newspaper, and pretended to read it. He enjoyed it which was pretty sad. He had no friends no family, he was a stubborn old man. Even the nun of the little kids gave him lecture but he took no notice of her. He occasionally stumbled down to the pub, got drunk, stayed on special days, like his birthday and Anzac Day. He wouldn't do anything else as he liked to remain. He would always eat take-away food, jam toast, such as chips, sweet rolls, lollies. He smoked a pack of cigarettes a day. What a slothful life! Even when he was a kid he was teased badly by his friends.

----- each bar 7 times

1.	composed by male student	3.	score written by student composer
2.	instrumentation not specified. Each cell to be repeated 7 times.	4.	template of the chords underlying the piece written out at the bottom of the second page. Pale, partly illegible photocopy

98.18 Narration

Narration

In the beginning the world was chaos. All was void. Until, time had commenced that was as the life of Eternity and so the need to be life on earth, which was one complete and only descent. The first family was not established, like at their generation, since those generations were growing, growing so much time a certain character by the name of Anthony was chosen to try, attempt, and most probably fail to try and control reproduction on the world as we know it. He was subject to fail and he did. The world was unable to support its occupants so Anthony led it looking to men, but quite unfortunately the gentle was life and the only person killed was Anthony. There was no funeral because Anthony was so hated. There was celebration and so became the first Anthony on earth.

The image shows a handwritten musical score for three instruments: Flute, Xylophone, and Cymbal. The score is written on multiple staves. At the top, there is a series of chords written out, which serve as a template for the piece. The Flute part is written in a treble clef, the Xylophone in a bass clef, and the Cymbal in a bass clef. The notation includes various rhythmic values and dynamic markings. The score is a photocopy of a student's work, showing some ink bleed-through and a slightly faded appearance.

1.	composed by male student	4.	score written by student composer – pale, partly illegible photocopy. Template of the chords underlying the piece written out at the top.
2.	written for flutes, xylophone and cymbal	5.	no repeats specified in score
3.	expansion of harmonies		

98.19 *Sentinels*

repeat each measure 5 times Sentinels 3. 1 = 60

Chord pattern

End on this chord

A Narration - "The Sentinels"

since the dawn of time -
They're watched
They've waited

What they are watching and waiting for remains a mystery to mere man. They await a higher purpose that no one but they know. When our world and countless others pass from their view like dust in a sunbeam they do no more than blink.

They watch
They wait

Their knowledge is limitless. They live on a plane of existence different from us. They have the power to destroy whole suns or make planets. But they reserve their power for a time when it will be needed.

They'll watch

1.	composed by male student	4.	score written by student composer – pale photocopy submitted. Template of the chords underlying the piece written out at the top.
2.	written for flutes, xylophone and cymbal	5.	no repeats specified in score
3.	development of pitch (harmonies)		

98.21 *The Fight*

The Fight

When the light comes forth we'll
be dead, our destruction due to a
nuclear threat.

Many missiles lined up in rows,
stored in Russian missile sites,
Waiting for the red button to be pushed
By the American president Mr. Bush -
Death could be near I ate this
fear.

Unless we yearn and strive for peace
our future life will be decreased.
Barren lands with hundreds of
dead bodies, all because some
presidents failed.

There is no future in the bombs so
fight while there time, or some.

Power is not what this world needs
but love and joy and the arms raised raised
So workably better, sister and friend
join with and fight to the end!

The Fight

Handwritten musical score for "The Fight" in 4/4 time. The score consists of 11 staves. The first 10 staves are melodic lines for a vocal line, with lyrics written below. The 11th staff is a chord pattern for guitar, with the instruction "repeat 5 times each bar". The score includes dynamic markings such as "p" (piano), "ff" (fortissimo), and "mf" (mezzo-forte).

1.	composed by male student	4.	score written by student composer. Template of the chords underlying the piece written out at the bottom.
2.	no instrumentation specified in the score	5.	each cell to be repeated 5 times
3.	development of structure		

98.22 *The Tree Turned Knob*

As down come closer and closer
 to the first strains of a light come from
 the trees: the sound of the chainsaw
 from the other side of the forest. When you
 are a tree this the second time in the world
 in the world.
 Then you hear it the spinning
 a chainsaw. The divided sound of the blade
 knocking pine needles down.
 The sun here will be nothing for you. Every
 will be gone but I am dead.
 Deep in the woods and streams
 chainsaw knocking at my feet. I'm going to
 I'm falling not even a single
 nothing but a tree stump.

Chords
 I II III I

1.	composed by male student	4.	score written by student composer. Template of the chords underlying the piece written out at the bottom.. Text submitted was a pale photocopy
2.	written for piano, glockenspiel, metallophone and cymbal	5.	no repeats specified in score
3.	development of structure		

98.24 '...the sea rises and falls'

The sea rises and falls swelling fast in the speed of the gale the wind lashes the ship but we must sail on the high mountains of white sail sing the song of the wind in startled tones, wind roaring waves smashing on and on for a 1000 miles in these latitudes of torment. soon the stern is ice and the roll of the ship is nothing graceful and the smash of the waves, as yet, unrelated

1.	composed by male student	4.	score written by student composer. Template of the chords underlying the piece written out at the bottom of the page
2.	instrumentation unspecified (piano)	5.	no repeats specified for each two bar cell in score
3.	expansion of texture		

Compositions associated with Teacher No. 98 written in response to the Canon project

98.25 *Kanon für 2 violinen und continuo*

KANON
Für 2 Violinen und
Continuo

1.	composed by male student	3.	score written by student composer. Photocopy with pale staff lines and partly illegible printing submitted.
2.	two violins and continuo	4.	canon at the bar at the unison

98.26

Handwritten musical score for 98.26, consisting of three systems of two staves each. The notation is dense and appears to be a canon at the octave.

1.	composed by male student	3.	score written by student composer. Pale photocopy submitted.
2.	instrumentation not specified	4.	canon at the bar at the octave

98.27 *The Ragamuffin*

"THE RAGAMUFFIN" By

They found him lying in a gutter half dressed the long-ago he used it
 They found him lying in a gutter half dressed the
 was not the best a lit-tle soul and a li-it-tle tu-nee and
 long-ago he used it was not the best a lit-tle soul and a
 old Ra-ga-muffin face wa-as now blessed and wa-as now blessed
 li-it-tle tu-nee and old Ra-ga-muffin face wa-as now blessed

1.	composed by male student	3.	score written by student composer.
2.	written for two voices	4.	canon at the bar at the unison

98.30 *The Cannon (sic) for The New Day*

The image displays a musical score for a piece titled "The Cannon (sic) for The New Day". The score is written on ten staves, organized into two systems of five staves each. The notation includes vocal lines (treble clefs) and accompaniment lines (bass clefs). The music features a mix of rhythmic patterns, including eighth and sixteenth notes, and rests. There are some markings above the notes, possibly indicating dynamics or articulation. The score concludes with a double bar line.

1.	composed by male student	4.	score written by student composer. Pale photocopy submitted.
2.	written for two voices, untuned percussion and unspecified melodic instruments	5.	canon at the bar at the unison and single line accompaniment
3.	simplification of accompaniment of project model		

98.31 Canon

Canon:- words sung to top notes of notes of p2.

Al-hah ah-ah oh-oh the day of
pp cresc. mf cresc.

warts! Make haste to snatch the joys as they may come or else for e-ver re-
mi-ni-gi-n sub-merged while

fast do they and once again and once again all has sunk and destruction came.

1.	composed by male student	3.	score written by student composer. Accompanying chords sketched in as Roman numerals. Pale photocopy submitted.
2.	written for two voices and unspecified melodic instruments	4.	canon at the crotchet at the unison

98.32 *Russian Revolution*

KANON - RUSSIAN REVOLUTION

Well we lived in St. Peters-burg in the spring of 1917, A
 Well we lived in St. Peters-burg in the spring etc.
 Well we lived in St. etc.
 time when peo-ple lived in fear - Lenin made it to the
 Kremlin and Nick's spirit-ing birds

1.	composed by male student	3.	score written by student composer. Pale photocopy submitted.
2.	written for three voices	4.	canon at the bar at the unison

98.33 Canon

Canon

The score is written in 2/4 time and consists of two systems of four staves each. The first system contains the first two phrases of the canon, and the second system contains the next two phrases. The lyrics are: "What shall I do", "Who knows what I should do", "Maybe I could do some things good", and "Maybe I could do some things good". The notation includes vocal lines with lyrics, piano accompaniment, and percussion parts. The score is a canon at the bar, with the second system starting at the same time as the first system's first measure.

1.	composed by a male student	3.	score written by student composer. Pale photocopy submitted.
2.	written for two voices, untuned percussion and unspecified melodic instruments	4.	canon at the bar at the unison

98.34 *Up and Down*

UP 9 DOWN

Question No. 121314151617198

UP AND UP AND UP AND DOWN AND DOWN AND UP AND UP AND DOWN AND DOWN AND

UP AND UP AND UP AND DOWN AND DOWN AND UP AND UP AND

UP AND UP AND UP AND DOWN AND DOWN AND

UP AND DOWN

UP AND UP DOWN AND DOWN UP AND DOWN AND

UP AND UP AND DOWN UP AND UP DOWN AND DOWN

UP AND DOWN UP DOWN

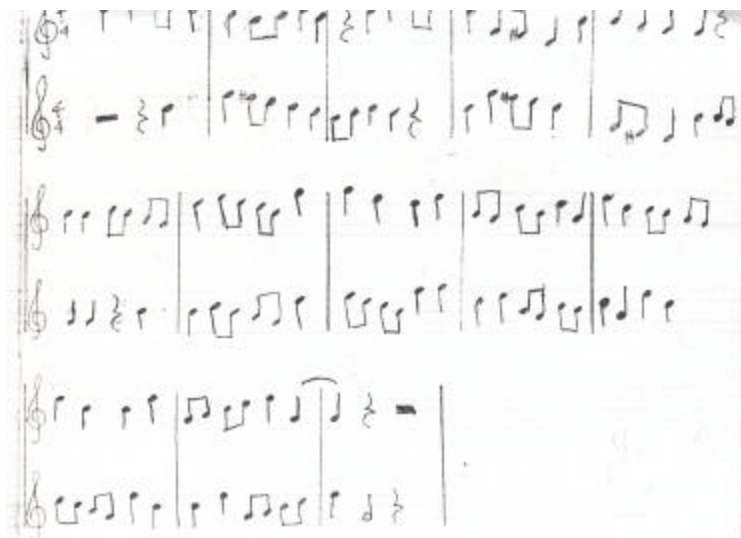
DOWN AND DOWN UP UP

UP AND DOWN AND DOWN UP DOWN

DOWN UP DOWN

1.	composed by male student	3.	score written by student composer. Pale photocopy submitted.
2.	written for three voices and untuned percussion	4.	canon at two bars at the unison with single line accompaniment

98.35









1.	composed by male student	3.	score written by student composer. Pale photocopy submitted.
2.	written for two unspecified melodic instruments	4.	canon at three crotchet distance at the unison

98.36

Handwritten musical score for exercise 98.36. The score consists of three staves. The top staff begins with a treble clef and a 3/4 time signature. The middle staff begins with a bass clef and a 3/4 time signature. The bottom staff begins with a bass clef and a 3/4 time signature. The music is written in a simple, rhythmic style, consisting of a series of eighth and sixteenth notes. The three staves are in unison, with the second and third staves starting at the beginning of the first bar of the first staff.

1.	composed by male student	3.	score written by student composer. Pale photocopy submitted.
2.	written for three unspecified melodic instruments	4.	canon at the bar at the unison

Teacher No. 100

<p>Profile of Teacher No. 100: female music teacher, country New South Wales, Australia, public high school – (12), 15, (18) year old student age groups. Information on education, preferences and experience, aspects of the teaching environment plus personal beliefs in, and teaching perspectives of, music education is located in Appendix for Chapter Seven.</p>
<p>Identification</p> <p>Teacher: No. 100 – music teacher Gender: female Study age groups: 12,15,18 years School location: country town in New South Wales Study project(s): 1. Phase Shifting (12, 15, 18 year age groups) 2. African rhythms (15/18 year age group) 3. Gamelan (15/18 year age group) Study timing: May 1990 Scores and transcriptions: 100.4 – 100.6 Recording(s): CD 8 Tracks 29 and 30</p>
<p>Teaching environment</p> <p>Class – Class age: year 8 = 13 to 14 years; year 9/10 = 15 year age group; {Students at a number of class levels and ages worked with the minimalist projects. For the purposes of this study the year 7 level are discussed in the 12 year old age group, the year 8, 9,10 levels are discussed in the 15 year old age group, and the year 11 and 12 students and those who worked with them in the Gamelan and African Rhythms projects are discussed in the 18 year old age group}.</p> <p>Class size (and gender): year 8 = 12; Class level: year 8; Number of music lessons for project class per week: 6 x c36 minutes.</p>
<p>Personal beliefs in, and teaching perspectives of, music education</p> <p>Teaching approach - Year 8 – with the semester system only have music for 6 months. We do workshops – listening to lots of kinds of music – improvising on pitch – composing on chords and just on the pentatonic scale. Singing/and accompanying more traditional notation. Rhythmic terminology and systems: French time names. Year 7 are only just beginning rhythm so have only graphic notation and year 8 invented their own e.g. crotchet = stroke  two quavers = staple  four semiquavers = caterpillar  quaver triplet = butterfly  quaver and two semiquavers = sta-pillar  two semiquavers and quaver = cater-ple. </p>

Approach and strategies adopted to introduce material from *The Pulse Music Album*

Project name: Phase Shifting – 15 year old age group.

Number of lessons: Four begun on 28 May 1990.

Familiarity of material: Similar to pentatonic melody work using ostinatos and improvised melodies.

Objectives: Just a chance to do practical work and give them an idea of how something can be 'organised'.

Music skills/activities: Singing – songs for fun (add simple bass, metallophone or xylophone part). Very basic.

Technology – recordings of minimalist music: No.

Composing activities –

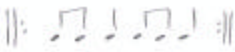
Sound and symbol: The students worked from sound to symbol.

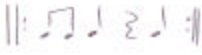
Discussion of structure/form: We just discussed the way it is organised.

Compositions – original: students.

Composition – the process: The students played as individuals then the class chose the ones they wanted – then they notated it.

Class 8X – 12 in the class.

We phase shifted the class rhythm 

When written out, bars 1,3,5 repeated 2 & 4 the same. Class therefore rearranged the rhythmic cell to 

Layer 1 and 2 practised and performed (not taped – Composition 100.4).

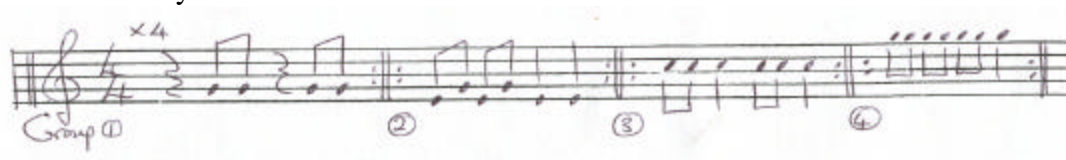



Composition 100.5 phase shifted.

Taped straight through with repeats x 2 each bar.

Then taped with another part added x 4 this time with 100.5 pitch cell as before. Added parts one at a time (Bass metallophone and xylophone on layer 2 not too good together).

Class ideas – layer 3:




Use of dynamics.

Student input: The students suggested notes to use and rhythms.

Composing as an incentive to the students' music learning: the students like to write and then play what they have written.

Student composition titles: No titles.

Performance –

Performing from notation, by ear, by memory: By ear first then by notation as well. Working out the rhythm and notation.

Improvisation: Exercises on instruments before beginning e.g. class echoes rhythms then echoes melodies on instruments. Then ‘question’ by teacher and improvised ‘answer’ by students or individuals.

Conducting: I conducted the whole time. They could play without a conductor if necessary.

Pulse: A slow and steady pulse – this is very hard to achieve in year 8.

Appraisal, evaluation –

Recording student work: The students enjoyed hearing back what they have done.

Response to the minimalist project – students: The students enjoyed the project for a while however they were well and truly ready for new work when it was offered. Perhaps as I did not have time to go into many other aspects of the kit.

Response to the minimalist project – teacher: I enjoyed some of it. Perhaps if we had had time to go further it may have been better but all the interruptions to school etc. made me rush through a bit.

I felt that some of the work, tho’ simple, was a little difficult to understand in the book and I found myself rereading parts to get it clear. I think it could be even more simple in its expression particularly when talking about ‘one measure’ for example, which I found it hard to adapt to.

Teacher’s response to working with material from *The Pulse Music Album*

How the project(s) fitted into the music programme: I found the workshops (African and Indonesian) slotted in well. I made a ‘space’ for most of the others.

The album of projects –

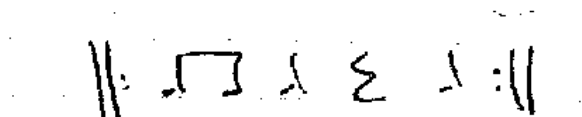
Future use of project material: I will use this project material again as workshops.

Teacher’s response to minimalist project material: The two projects Gamelan and African Rhythms were set out well – the other pulse work is not as straightforward to read and understand as one might think. I believe because of this, a non-trained music teacher could have lots of trouble understanding parts of it.

Students’ response to minimalist project material: The students’ responses were positive in most cases – the only criticism is the continuation of the idea which sometimes lost their interest.

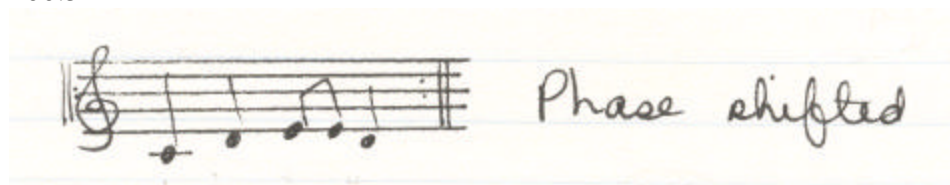
Compositions associated with Teacher No. 100 written in response to the Phase Shifting project

100.4



1.	composed by class	4.	score written by teacher
2.	no instrumentation specified	5.	no repeats specified
3.	pastiche of model		

100.5



1.	composed by class	6.	crotchet = c.136
2.	played on metallophones and xylophones	7.	score written by teacher
3.	each cell repeated twice	8.	one take – vigorous, accurate
4.	playing time 20 secs	9.	CD for Appendix 8 Track 29
5.	development of pitch (pitch set)		

100.6

Tape ② Added another part X 4 this time
As before -
To Added parts one at a time
[Bass metallophone + xylophone
on layer 2 not too good together

Layer 3
X 4 groups

class ideas

use of dynamics

1.	composed by class	6.	crotchet = c.128
2.	played on metallophones and xylophones	7.	score written by teacher
3.	each cell repeated four times	8.	one take – vigorous and accurate
4.	expansion of structure and dynamics	9.	CD for Appendix 8 Track 30
5.	playing time 1 min 20 secs		

Teacher No. 116

<p>Profile of Teacher No. 116: female composer-in-schools at two New Zealand schools – (12 and) 15 year old student age groups. Information on the teacher’s response to working with material from The Pulse Music Album located in Appendix Seven.</p>
<p>Identification</p> <p>Teacher: Composer-in-schools No. 116. Gender: female Study age group: (12 and) 15 years – intermediate, secondary School location: Auckland, New Zealand Study project(s): 1. African Rhythms – 15 year old age group 2. Music Weaving – 15 year old age group Study timing: March and April 1990 Scores and transcriptions: 116.2 and 116.3 Recording(s): CD 8 Tracks 31 and 32</p>
<p>Education, preference, experience</p> <p>Experience teaching twentieth century art music styles: I use Stravinsky for discussion of rhythm and also “5 finger” pieces which I sometimes use as an exercise for secondary students. I also get them to write a 12 tone piece, for which we play Schoenberg, Berg, Webern, and various other composers from overseas (John Cage for aleatoric, others for free-atonal), and New Zealand come up, but I do generally spend music time on practical things the students are doing themselves. Experience teaching music of other cultures: Gamelan, African drumming, theatre music from Asian countries etc. to listen to and compose in that style.</p>
<p>Teaching environment</p> <p>School - School situation: Auckland, New Zealand Public or private: 1. 15 year olds - public secondary school. How long has the school been open: 1. over 20 years. Level: 1. Form 5 (secondary)</p>

Number of students:

1. 1000

Socio-economic background of parents: generally high socio-economic group;

School's interest in music:

Strong option classes in instrumental tuition – I go to the school 1 day a week as composer-in-schools. Orchestra, choir, jazz band, instrumental tuition, recorder group.

Venue for music lessons:

music classroom

Music equipment:

well-equipped. Many mallet-struck instruments, synthesiser, string instruments, percussion. No recording facilities.

Curriculum: my own. This is the good thing about composer-in-schools' schemes, it gives you freedom to work over and above the syllabus.

Curriculum ranking of music activities:

1. improvisation/composition/arranging; 2. Recorder/instrument playing; 3. Aural training (although these three are altogether really); 4. Singing; 5. Notation skills; 6. Listening; 7. Music in society/in the community; 8. Music history/musicology; 9. Movement.

Class -

Class age: 14-15 years

Gender of class: male/female –

1 boy, 5 girls

Class level:

Form 5, secondary.

Class mix:

Medium ability.

Music background of the class:

all learn instruments, option music to Form 5.

Number of music lessons for project class per week:

four to five

Length of lesson:

one hour

Personal beliefs in, and teaching perspectives of, music education

Teaching philosophy: To encourage creative music-making at all ages, whether or not the pupil will take up music as a career, or be a performer or a composer.

Personal ranking of music activities: same as the curriculum ranking – 1.

improvisation/composition/arranging; 2. Recorder/instrument playing; 3. Aural training (although these three are altogether really); 4. Singing; 5. Notation skills; 6. Listening; 7. Music in society/in the community; 8. Music history/musicology; 9. Movement.

Teaching method:

Secondary:

Individual work with compositions, two performance evenings a year of original compositions.

Work within specific 'brief' i.e. fanfare, piano piece, violin duet, or continuation of given openings, jazz improvisation etc. etc.

Pitch terminology and systems: letter names, not sol-fa. Use of scales/modes;

Harmonic terminology and systems: triadic based; primary chords first at Form 1 level, usually in a 12 bar blues piece. Also play triads up a scale, then settle on a pattern i.e. I IV V vi / ii V I /

Rhythmic terminology and systems: counting not French time-names, English rhythm value names;

Evaluation and assessment: at senior level required by curriculum, otherwise I don't evaluate and assess formally. The approach varies according to the school. A mark is given from assessment of a folio of compositions, including effort, originality, presentation, successful performance (most important).

Preliminary opinion of The Pulse Music Album project material: The project material will fit into the curriculum.

Approach and strategies adopted to introduce material from *The Pulse Music Album*

Project name: African Rhythms – 15 year age group.

Number of lessons: 3 lessons, but not exclusively on the project material – April 1990.

Familiarity of material: This was similar to the sort of thing at 4th and 5th form level.

Objectives: To achieve an interesting rhythmic piece using cross rhythms, which was exciting to listen to.

Collaboration/integration: No.

Technology – recordings of minimalist music: No.

Composing activities -

Sound and symbol: Sound to symbol. No score was made, but they were required to figure out how to notate their rhythms.

Discussion of structure/form: Yes, again it fell into the ABA form.

Compositions - original: Children's work.

Compositions - time taken to write: About two to three hours spread over a period of time. No score written.

Student Input: Entirely the children's work, after a lot of discussion of cross rhythm and experimentation.

Composing as an incentive to the students' music learning: Writing helps the children to get inside the techniques they need for performance, aids confidence in performing and helps development of memory.

Student composition titles: *In Welcome*. It was an important concept as the piece was intended to open a small concert.

Performance –

Performing from notation, by ear, by memory: By ear and from memory.

Improvisation: None.

Conducting: No conductor, just worked together.

Appraisal, evaluation -

Recording student work: The cassette player was especially useful in a piece like this to stand back from the performance and decide whether the different sections were the right length.

Responses to the project material -

Response to the minimalist project – students: Enjoyed the project very much.

Response to the minimalist project - teacher: Enjoyed working with the material.

Project name: Music Weaving – 15 year age group.

Number of lessons: 1 double-period lesson – April 1990.

Familiarity of material: Similar to ostinato techniques.

Objectives: For the students to compose a short piece using “music weaving” techniques.

Collaboration/integration: No.

Technology – recordings of minimalist music: Before they started, an extract from *In C* by Terry Riley, *Desert Music* by Steve Reich was played. Some liked it, some found it monotonous.

Composing activities -

Sound and symbol: They came up with the different patterns on their instruments, then they were written on the board by the students. No score was made.

Discussion of structure/form: It turned out to be in a fairly common format, ABA and we discussed this. Could be used to discuss bridge passages, which we got over by using percussion cues.

Compositions - original: Students’ work.

Compositions - time taken to write: Two hours.

Student Input: Entirely the children’s work.

Composing as an incentive to the students’ music learning: Writing helps the children to get inside the techniques they need for performance, aids confidence in performing and helps development of memory.

Student composition titles: They called it *Sinister Piece*. I don’t think this really sums up what the piece was about, as they named it after words, but they thought it was suspenseful.

Performance –

Performing from notation, by ear, by memory: By ear and from memory.

Improvisation: The percussionist was in charge of the overall length of the piece. Her playing was used as ‘cues’ for the other players to change chord etc.

Conducting: No conductor was used, the piece was largely improvised but a pulse would have made things easier.

Pulse: No separate pulse. This would have made it easier to play.

Appraisal, evaluation -

Recording student work: They were pleased that they had achieved a finished result.

Responses to the project material -

Response to the minimalist project – students: Positive.

Response to the minimalist project - teacher: Positive.

Compositions associated with Teacher No. 116 written in response to the African Rhythms project

116.2 *In Welcome*

In Welcome

The musical score for 'In Welcome' is written for five percussion instruments: Drums, Wood blocks, Clap sticks, and Gong. The score is divided into two sections, *mf* and *p*, with a 'x8' multiplier for the first section. The notation uses various rhythmic symbols like eighth notes, quarter notes, and rests.

1.	composed by students	6.	quaver = c.310
2.	performed on untuned percussion by students	7.	score transcribed by researcher
3.	instruments enter one by one starting with the first layer. In the third cell the instruments enter one by one emerging over material from the second cell.	8.	one complete take – evocative and accurate performance at the opening of a concert
4.	expansion of structure, construction, time, dynamics and context	9.	CD for Appendix 8 Track 32
5.	playing time 1 min		

Compositions associated with Teacher No. 116 written in response to the Music Weaving and Harmonic Prisms projects

116.3 *Sinister Music*

Sinister Music

The musical score for 'Sinister Music' consists of five staves. The top staff is for Xylophone, the second for Metallophone, the third for Flute, the fourth for Strings, and the bottom for Electronic keyboard. The score is marked with a first ending bracket and includes dynamic markings such as *p* and 'Sistrum sweep' with wavy arrows. The music is written in a single system with repeat signs.

1.	composed by students	5.	playing time 1 min 20 secs
2.	performed with metallophones, electric keyboard, strings, flute and sistrum by students	6.	score transcribed approximately by researcher
3.	each layer played at a different tempo and each cell repeated several times	7.	one complete take – accurate and evocative – performed in a concert
4.	expansion of structure, construction and time (different tempi)	8.	CD for Appendix 8 Track 31

Teacher No. 143

Teacher profile No.143 : a male music teacher and composer in a public secondary girls' school in Auckland, New Zealand - 15 year old age group

Identification

Teacher: No. 143 – music teacher and composer – public secondary girls' school

Gender: male

Study age group: 15 years

School location: Auckland, New Zealand

Study project(s): Phase Shifting, Phase Shifting Melodies

Study timing: 1993

Scores and transcriptions: 143.1 – 143.6

Recording(s): CD 8 Tracks 33 – 38. Enclosed is a tape of one classes' versions of the

<p>exercises. Enclosed is a copy of the overheads projector version of the material I have used. There are some alterations in some of the material from your original versions – you can draw your own conclusions about the reasons for that.</p>
<p>Education, preference, experience</p>
<p>Qualifications: MMus (1st class honours); BA; FTCL</p> <p>Preferences (experience) –</p> <p>Music Activities:</p> <p>Sing</p> <p>Write/arrange music</p> <p>Listen to music</p> <p>Years of teaching experience: 13 years</p> <p>Years of teaching in this school and ages taught: 13 years - teaching ages 13-17 years</p> <p>Years of experience teaching the age group of the study: 13 years</p> <p>Experience teaching twentieth century art music styles: Stravinsky/Penderecki – study works;</p> <p>Minimalist composers – as the basis of practical creative projects;</p> <p>New Zealand composers</p> <p>Experience teaching music of other cultures: Some Asian music – pentatonic creative work.</p>
<p>Preferences (experience) -</p> <p>Musical styles:</p> <p>Western classical music – pre 20th C</p> <p>Western classical music – 20th C</p> <p>Minimal music</p>
<p>Teaching environment</p>
<p>School -</p> <p>School situation: Auckland, New Zealand</p> <p>Public or private: Public</p> <p>How long has the school been open: 76 years</p> <p>Level: Secondary</p> <p>Number of students: 1640</p> <p>Socio-economic background of parents: Mid-upper socio-economic levels. School draws on a zone covering the older established areas of the city.</p> <p>School's interest in music: Strong</p> <p>Venue and resources: Music room. Well equipped – 4 electronic synthesiser keyboards, 16 keyboard laboratory, 2 music rooms, 4 small studios, assorted classroom percussion (glochenspiels, autoharps, xylophones (small), untuned percussion), 1 full-size xylophone, 2 double basses, 2 drum kits, CD/ tape/ record playback equipment in classrooms, assorted orchestral instruments (hired out during the year), 20 guitars, 1 bass guitar.</p> <p>Curriculum: National</p> <p>Curriculum ranking of music activities: 1. Recorder/instrument playing, improvisation/composition/ arranging; 2. Singing, aural training; 3. Listening; 4. Music history/musicology; 5. Notation skills; 6. Music in society/in the community; 7. Movement.</p> <p>Class –</p> <p>Class age: 16-17 years – average age 16</p> <p>Gender of class: 15 girls</p>

<p>Class level: Form 6 Music</p> <p>Class mix: Mixed ability</p> <p>Music background of the class: Have taught some students 4 years; others are new to school, or were not in my classes in previous years.</p> <p>Most have good instrumental/vocal skills – many with Grade 5+ and qualifications (Royal Schools/ Trinity College) – Copy of course outline attached.</p> <p>They were Form 6 students (2nd to last year of secondary school) and a music option class. I was keen to try the things first with students of a musical background to get used to the exercises. I have tried one or two things with other younger classes but not in a systematic manner yet.</p> <p>Number of music lessons for project class per week: 4 lessons per week – 2 on performance work, 2 on history/composition.</p> <p>Length of lesson: One hour</p>
<p>Teaching approach</p> <p>Teaching approach -</p> <p>Teaching philosophy: My principal objective as a music teacher is to involve students in practical music-making wherever possible. This means both performance of existing music as well as the creation of new music by the students themselves.</p> <p>Music is essentially a performance art and it is important that students come to an understanding of such concepts as form and style through their own performance work. Students need to be exposed to a wide range of music, and given the opportunity to create music for a range of media.</p> <p>Educational aims: I have enclosed a copy of the form 6 course outline. It is the centre of a leaflet we give to the students but does cover the essential points.</p> <p>Personal ranking of music activities: 1. Singing, improvisation/composition/arranging; 2. Recorder/instrument playing; 3. Listening; 4. Music history/musicology; 5. Aural training; 6. Notation skills; 7. Music in society/ in the community; 8. Movement.</p> <p>Teaching method: I don't feel I have a particular 'method' but simply draw on as wide a range of techniques as possible.</p> <p>Rhythmic terminology and systems: Traditional 'English' names</p> <p>Evaluation and assessment: Required by the curriculum. Performance assessment (achievement based assessment); Compositions – handed in for grading; Aural testing – listening tests History – written assignments</p> <p>Preliminary opinion of The Pulse Music Album project material: I look forward to receiving the material and putting it into practice. I teach at each of the secondary school levels here so could test it out with a variety of age groups.</p> <p>I have been very interested in minimalism since the mid-1980's and my own composition style has been strongly influenced by it since then. Actually a series of deadlines has also tended to push other matters to one side for a few months – as usual compositions tend to get left to the last minute and then everything becomes frantic!</p>
<p>Project name: (Phase Shifting, Phase Shifting Melodies)</p>

Number of lessons: half to one lesson

Familiarity of material: Similar to some practical rhythm activities. Have used Reich's *Clapping Music* as the basis of some rhythm work.

Objectives: To discover students' rhythm skills;

To explore the concept of repetitive structure in music.

Music skills/activities: vocal skills, instrumental skills.

Technology – recordings of minimalist music: prerecorded music examples on cassette

Composing activities –

Composition pieces/exercises from *The Pulse Music Album* projects: pieces from the album were played in lessons

Compositions – original: teacher – see my own versions of material – all have been attempted. My comments tend to be based on the use I have made of my own 'versions' of your material. I found some of the exercises needed abbreviating, and of course the overhead transparencies do make using the material easier in class.

Student input: we found some of the melodic/harmonic pieces rather long and sometimes overly dissonant.

Performance –

Performing from notation, by ear, by memory: from notation.

Improvisation: yes.

Conducting: Not conducted. Generally pieces were able to be performed without a conductor. Some did get lost from time to time.

Pulse: yes sometimes there was a separate audible pulse. This helped keep things together.

Appraisal, evaluation –

Recording student work: Yes, students could hear that rhythms were not always handled accurately.

Response to the minimalist project – students: Yes, positive in general.

Response to the minimalist project – teacher: Yes, positive.

How the project(s) fitted into the music programme: Fits into the Form 6 when I do a unit on minimalism – especially Glass and Reich's music. Needs special space at other levels.

I took on far too much in the first half of this year (including new works for the Beverly Hills High school choir and the Auckland Philharmonia Orchestra, plus music for a school production of *Romeo and Juliet*) and have got well behind in some things.

Music lessons planned in advance or immediate: Some planning and re-thinking of material (this can be seen from my 'versions' of some of the ideas)

Minimalist projects outside the classroom:

Ability to achieve a balance between various music activities and concepts: Good balance. Would like to see some more improvisation based on repeating chord patterns.

The album of projects –

The projects as a sequential programme: Yes, especially if integrated with aural training exercises.

Age group suited to the projects: Easier rhythm pieces for primary teaching; melodic/harmonic projects for secondary teaching.

Strengths and weaknesses of the projects: Good basis for creative work; Some material is too complex or too extended (e.g. *Persian Carpet*); Good material to extend weaker students or those with limited notational skills. Useful for beginning groups as well as musically advanced students.

Future use of project material: Yes, most of them are useful at different levels. I am actually just starting a unit on minimalism with the form 6 class and will be using the ideas again this year.

Compositions and worksheets associated with Teacher No. 143 written in response to the Phase Shifting, Phase Shifting Melodies and Music Weaving projects

Worksheet page 1

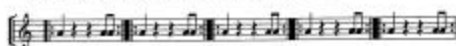
Phase Shifting 1

Phase shifting is a technique where two musical ideas gradually shift "out-of-phase" with each other. One method is to have one pattern speed up while the other stays at a steady speed. A similar effect is obtained by using two rhythm patterns. One repeats over and over while the other moves ahead one beat every now and then - eventually the process brings the two rhythms back together.

Consider the following rhythm pattern:



Here it is, written out one more time than there are beats in the bar:



Now here it is again, but each bar moves the first beat of the bar down to the end of the bar to create the next bar:



Now perform the two rhythms together. The performers of line 2 may move on when they wish to. The piece ends when both players reach the last bar and the rhythm is "in phase" once again. Players may need to decide in advance how many times each bar is performed. Decide also your tempo, dynamics etc.

EXTENSION:

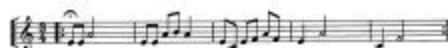
Use all the five versions of the basic 'cell' together.
Instruments: untuned percussion such as wood blocks, claves etc, or try using voices.
Either start together or enter one by one.
Decide at the start how many times each bar will be repeated.

Worksheet page 3

143.2

Phase Shifting 3: Melodies 1from material devised by
Clara Elton

The notes above are a 'pentatonic' scale - a five note scale with the beginning note repeated at the top.
We can use this pattern of notes to create a simple melody - for example:



Now create a second melody of different length - write a simpler melody in the bass clef (or you can use treble clef again) - for example:



Now play the 2 melodies together.
Because they are of different lengths they will move out of phase.
Repeat until the 2 phrases come back together.
End on the pause note.

Now try your own melodies.
Use one of the following sets of notes - they are not all pentatonic scales.
Make one part more interesting rhythmically than the other.



1.	composed by teacher	6.	crotchet = c.95
2.	written for metallophones	7.	score by teacher
3.	upper part repeated 3 times, lower part repeated 5 times	8.	one take - accurate performance
4.	development of construction and mode	9.	CD for Appendix 8 Track 34
5.	playing time 30 secs		

143.3

1.	composed by small group of female students	6.	crotchet = c.88
2.	played on piano and glockenspiel	7.	score transcribed by researcher
3.	upper part repeated 4 times, lower part repeated 6 times	8.	two takes; first take at pitch (on CD), second take without bass register. Both accurate performances
4.	development of construction and register	9.	CD for Appendix 8 Track 35
5.	playing time 20 secs		

143.4

1.	composed by small group of female students	6.	crotchet = c.133
2.	played on piano and glockenspiel	7.	score transcribed by researcher
3.	upper part repeated 3 times, lower part repeated 8 times	8.	One take; accurate performance
4.	development of construction and instrumentation	9.	CD for Appendix 8 Track 36
5.	playing time 33 secs		

143.5

1.	composed by small group of female students	6.	crotchet = c.137
2.	played on xylophone and glockenspiel	7.	score transcribed by researcher
3.	upper part repeated 3 times, lower part repeated 8 times	8.	one take; inaccuracies in bass line
4.	development of construction and time (ritardando at the end)	9.	CD for Appendix 8 Track 37
5.	playing time 31 secs		

Worksheet page 4

143.6

Phase Shifting 4

from material devised by
Diana Blom

Fast and vigorous

Printed above are two rhythms, each with a different number of beats in the bar.
The two rhythms begin together - the quavers in each are the same speed.
Work out how many bars need to be played of each rhythm before they come
back into phase (i.e. the 2 bars begin together again).

Now try these 2 patterns together:

Make up your own pair of rhythm patterns.
Perform them together.
Use two contrasting sounds.

1.	composed by teacher	6.	quaver = c.206
2.	performed with clapping	7.	score by teacher
3.	upper part repeated 3 times, lower part repeated 5 times	8.	one take – accurate, vigorous performance
4.	development of metre	9.	CD for Appendix 8 Track 38
5.	playing time 15 secs		

make any musical observations they could. They came up with repetition, gradual changes, different instruments dominating at different times, dynamic contrasts, different rhythms being heard.

Then proceeded with discussion of what pulse music is (a la your notes at front of kit). We tried phase shifting each student writing their own measure. I was fairly disappointed with both the results and the response from the kids. They didn't perform them very well and seemed to quickly lose interest in the exercise. Started example B – students composing a 4-note chord. We'll continue.

5th November 1991: Double period – students wrote $\frac{3}{4}$ note chord and composed 2 layered piece of music (phase shifting) as in example *Wind Chimes*. I did an example on board first and performed it. Students came up with some good results. I forgot to get them taped and will do this next time. Last 5 minutes of lesson I asked students to write a quick, brief evaluation of the work we have done thus far. The responses were quite heartening. Here are a few:

- It was fun to do. I enjoyed it although some parts were hard.
- This style of music shows new values on creating own composition. It is interesting and is enjoyable which has helped my music rhythmically.
- Interesting. I have never heard pulse music before. Fun to do but the unco-ordinated chords and rhythms aren't the best sounding, but overall it was interesting.
- It was interesting the way that you can build up a polyphonic piece from a single phrase of rhythm and melody. I did enjoy doing it, but as for the result, well, I don't really like that kind of music.
- ...interesting – I like the way the simple rhythm/melody is combined to create a complex piece, but I don't really like it very much to listen to because of the monotony. I think it's a good idea to study it to broaden your idea of all different types of music.
- I found it reasonably interesting but cannot understand how anybody can get any pleasure out of listening to it or playing it, unless they like to impress people on how academic they are. If that's what turns them one fine, but I'd prefer something that didn't give me a headache. I don't figure I learnt very much, but I guess it was a new experience which is always good and important.
- ...quite good... a real challenge to try and play the varying tune keeping in time with your partner...I learnt to keep in time a little better.
- I didn't find pulse music very interesting but it is good to learn about a different style of music. The activities were interesting but not something I'd like to spend a lot of time on.
- ...it amazed me that four notes and a simple rhythm can give a good final result. It became evident that to make an interesting polyphonic piece of music it is not as difficult or complicated as it may seem.
- ...quite boring and too repetitive and you get tired of it too quickly. It's the type of music you'd only listen to once. However, it's fun to play because it's simple once

you've distorted the rhythm or melody you feel as if you've really accomplished something.

- The only thing I got out of pulse music was to rephrase music. I am indifferent to the subject.

So there you go! I thought these were worth including and hope they are of some value to you. I was quite pleased with their efforts and interest level for this lesson.

7th November, 1991: Performed *I think it's going to rain* and discussed the technique involved in it.

8th November, 1991: Recorded *I think it's going to rain* and discussed phase shifting melodies. Used *Lazy, Lazy Boat* as an example. Students will compose a similar piece.

12th November, 1991: Tuesday double period. Students composed phase shifting melodies (2 phrases of different lengths). They didn't attack this exercise with enthusiasm (to say the least!) and the results were less than inspiring. Whilst all students attempted it 2 or 3 of them really didn't grasp the concept particularly well. I have recorded the 2 best examples. I think the lack of interest perhaps stems more from Year 10's 'winding down' activities for the year and they seem more preoccupied with Year 10 farewell dances etc....

I think the activity is a worthwhile one and would work better if I wasn't presented with end of year school organisation activities to contend with. The unit has lots to offer and selected activities (for me) are very interesting. I am enjoying learning more about pulse music.

13th November, 1991: Explained Add and Subtract listened to examples from tape. The group has now decided they have had enough of pulse music. They have expressed their desire to do something else!!! I think this might be an appropriate time to do just that. Perhaps this is an indication of the limits of this music – is really cannot sustain students' interest over an extended period – 2 weeks is perhaps enough.

I guess what I'm really trying to say is that whilst the music has its merits it does get 'boring' (for 15 year olds) after a while.

If it was to do something like this again I think I would structure a 2 week unit on it (with snippets of the different techniques you have presented) and organise it better in terms of a teaching program.

Thanks for the opportunity to use the kit. I can't really envisage how one would successfully adapt much of this work to 6 year olds.

Compositions associated with Teacher No. 147 written in response to the Phase Shifting and Phase Shifting Melodies

147.1

1.	composed by students	6.	crotchet = c.97
2.	performed with xylophone and metallophone	7.	score transcribed by researcher
3.	upper part repeated 5 times, lower part repeated 10 times	8.	one take – inaccurate pulse which sounded like accelerando phasing
4.	development of rhythm and construction	9.	CD for Appendix 8 Track 39
5.	playing time 25 secs		

147.2

1.	composed by students	6.	crotchet = c.120
2.	performed on xylophones	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – inaccurately played
4.	expansion of harmony and feel	9.	CD for Appendix 8 Track 40
5.	playing time 23 secs		

147.3

The musical score for piece 147.3 consists of two systems of staves. The first system has two staves: the top staff is labeled 'piano' and the bottom staff is labeled 'metallophone'. Both staves begin with a first ending bracket marked '1' and 'x2'. The second system also has two staves, with a third ending bracket marked '3' and 'x2' at the beginning of the first staff. The music is written in treble clef with a common time signature (C) and a key signature of one flat (Bb). The notes are primarily eighth and quarter notes.

1.	composed by students	6.	crotchet = c.105
2.	performed on piano and metallophone	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – inaccurate performance
4.	expansion of feel	9.	CD for Appendix 8 Track 41
5.	playing time 23 secs		

147.4

The musical score for piece 147.4 consists of two systems of staves. The first system has two staves, both labeled 'metallophone'. Both staves begin with a first ending bracket marked '1' and 'x2'. The second system also has two staves, with a third ending bracket marked '3' and 'x2' at the beginning of the first staff. The music is written in treble clef with a common time signature (C) and a key signature of one flat (Bb). The notes are primarily eighth and quarter notes.

1.	composed by students	6.	crotchet = c.115
2.	performed on metallophones	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – inaccurate performance
4.	expansion of feel	9.	CD for Appendix 8 Track 42
5.	playing time 23 secs		

147.5

1.	composed by students	6.	crotchet = c.96
2.	performed on metallophones	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – inaccuracies in the performance
4.	development of construction	9.	CD for Appendix 8 Track 43
5.	playing time 27 secs		

147.6

1.	composed by students	6.	crotchet = c.99
2.	performed on xylophones	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – inaccurate performance
4.	expansion of feel	9.	CD for Appendix 8 Track 44
5.	playing time 28 secs		

147.7

1.	composed by students	6.	crotchet = c.105
2.	performed on metallophones	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – accurate performance
4.	expansion of harmony	9.	CD for Appendix 8 Track 45
5.	playing time 22 secs		

147.8

1.	composed by students	6.	crotchet = c.96
2.	performed on xylophone and glockenspiel	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – inaccurate performance – each player at their own tempo
4.	expansion of feel and harmony	9.	CD for Appendix 8 Track 46
5.	playing time 18 secs		

147.9

1.	composed by students	6.	crotchet = c.103
2.	performed on glockenspiel and metallophone	7.	score transcribed by researcher
3.	each cell repeated twice	8.	one take – accurate performance
4.	development of construction	9.	CD for Appendix 8 Track 48
5.	playing time 25 secs		

147.10

1.	composed by students	6.	crotchet = c.111
2.	performed on piano by teacher	7.	score transcribed by researcher
3.	upper line repeated four times, lower line repeated five times	8.	one take – accurate performance
4.	development of metre and pitch set	9.	CD for Appendix 8 Track 48
5.	playing time 47 secs		

147.11

1.	composed by students	6.	crotchet = c.88
2.	performed on piano by teacher	7.	score transcribed by researcher
3.	upper line repeated four times, lower line repeated five times	8.	one take – accurate performance
4.	development of metre and pitch set	9.	CD for Appendix 8 Track 49
5.	playing time 28 secs		

Table 8.1 Commonalities and differences between the eight expanders

Education, preferences, experience:
<ul style="list-style-type: none"> • all were musically qualified; • six were experienced teachers; • seven were specialist music teachers, one a composer-in-schools; • all listed eclectic music preferences; • seven noted a preference for twentieth century art music; • six noted they composed and arranged as personal activities;

- seven teachers had previously taught twentieth century art music and four specified composing activities;
- seven teachers had previously taught Asian music, six of which were countries with a keyed percussion (gamelan) ensemble.

Teaching environment:

- three worked in schools whose school population drew largely from the upper socio-economic group, two drew from the lower and two drew from both strata;
- seven teachers taught in public schools, one in a private school;
- seven teachers worked in schools with a strong interest in music;
- seven teachers worked with students who had chosen to study music;
- seven teachers noted that their students had a reasonable to strong musical knowledge;
- five teachers considered their music resources were reasonable to good.

Teaching perspective:

- six teachers placed an emphasis on empowerment and an holistic approach to music in their music philosophy;
- five teachers ranked composing, improvising and arranging activities highest.

Approaches and strategies:

- six predicted that the project material would fit into their curriculum;
- seven teachers introduced their students to the Phase Shifting project, the first in the album;
- three listed aims of empowerment and an holistic approach to music, five focused on skills and four named composing activities;
- seven teachers noted that the project material offered common ground with previous work;
- all focused their teaching on music composition;
- six adopted a strategy sequence which included performing one of the project compositions as model, (recording), discussion, (improvisation), composition based on a model, performance, recording, evaluation;
- six teachers played prerecorded minimalist excerpts and of these five worked through negative student response;
- seven teachers contextualised composing activities by making them relevant to contemporary society;
- all offered students a prescriptive composition task design – model. Of these, two teachers wrote the model themselves, and four offered a multi-model task design;
- seven teachers discussed aspects of structure and/or construction;
- three teachers composed and therefore worked with the material prior to introducing it to their students;
- all worked with the material for a long period of time, from four to ten lessons;

- seven teachers noted that the students took between one and two lessons to compose;
- five teachers adopted group and class composition which resulted in student interaction with others in the classroom and composition by committee;
- five teachers encouraged students to compose as individuals;
- two recycled material from one composition to another;
- six teachers submitted student compositions with no titles and two submitted compositions with titles;
- two teachers integrated the project material with other subjects e.g. Asian studies, maths;
- four noted that their students composed from sound to symbol and two from symbol to sound;
- all improvised;
- five teachers offered their students keyed percussion i.e. metallophones, on which to compose and play;
- all introduced control over the pulse;
- all noted that their students played by ear and/or memory and usually from notation as well;
- all submitted two or more recordings of accurate performances of all compositions submitted to the study;
- seven teachers used the recording medium for student self-reflection, self-evaluation, empowerment and discussion;
- four teachers selected and adapted learning tasks according to the students' different developmental levels and the students' reasoning was sought within these tasks;
- seven teachers adopted a student-centred approach and one adopted the role of instructor, leading students to compositional expansion through her own improvising with few aspects of student-centredness in her approach;
- I interpreted the roles adopted by all the teachers to be enablers who allowed and encouraged the students to explore as they composed. Of these, two were less committed to an enabling role than the others;
- three teachers adopted the role of teacher as composer;
- four teachers adopted the role of teacher as student.

Outcomes:

- eight teachers submitted compositions which expanded aspects of the project models;
- seven teachers submitted compositions which expanded the structure of the project models;
- all teachers submitted compositions which developed several musical parameters;
- six teachers empowered their students through humour, a composition concert, minimalism opening up new composition ideas, simple composition formula

<p>producing a satisfying compositional product fairly quickly, hearing back their compositions through recording, repetition of minimal music developing performance accuracy leading to student confidence;</p> <ul style="list-style-type: none"> • three teachers who ranked composing and arranging activities highest contextualised the project material by making it relevant to contemporary society; • all registered criticisms of <i>The Pulse Music Album</i> contents; • all teachers were positive about some of their engagement with some of the projects; • the students of six teachers were positive about the projects when pitch and melody were involved e.g. Phase Shifting and Music Weaving; • the students of two teachers were negative about their work with the Phase Shifting project; • seven teachers expressed interest in using the material in the future. One expressed interest if the material fitted the music programme.

Table 8.2 Commonalities and differences between the three developers

<p>Education, preferences, experience;</p> <ul style="list-style-type: none"> • all were musically qualified; • all were experienced teachers; • all were specialist music teachers; • one listed eclectic listening preferences, one narrow, and one did not address the question; • all noted a preference for twentieth century art music; • two noted they composed and one, arranged, as personal activities; • all had previously introduced their students to twentieth century art music and two specified composing activities; • all had previously introduced their students to music of non-Western cultures, two in relation to Western art or popular music, one through composition.
<p>Teaching environment:</p> <ul style="list-style-type: none"> • two worked in schools whose student population drew largely from a low socio-economic group and one drew from the mid to upper socio-economic group; • all taught in urban public schools in Australasia; • two worked with students whom they described as poorly or negatively motivated; • all worked with students who had chosen to study music; • all noted that the previous musical experience of the students ranged from strong to very weak; • all felt their music resources were reasonable to good.

Teaching perspective:

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| <ul style="list-style-type: none"> • two did not address the question about their teaching philosophy/perspective while one adopted an holistic perspective. • two ranked singing highest, one including composition, and one adopted an integrated approach to music activities. |
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Approaches and strategies:

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| <ul style="list-style-type: none"> • two felt that the material was compatible with their current music programme while one would need to make a special place; • two teachers introduced their students to the Phase Shifting project, the first in the album; • the aims of the two developers were focused on skills, one on culture with one naming composing activities; • all teachers noted that the project material offered common ground with previous work; • all undertook activities which took time away from the focus of student music composition e.g. computer programme, African culture, professional composing; • all adopted a strategy sequence which included performing one of the project compositions as model, discussion, composition based on a model, performance, recording, evaluation; • all played prerecorded minimalist excerpts; • all contextualised the project material and made it relevant to the students e.g. computer, African culture, professional composer; • all offered students a prescriptive task design, model, with one also using a template task; • all discussed aspects of structure and construction; • two worked with the project material over a long period of time i.e. 12-18 lessons, one working for only one and a half lessons; • the teachers noted that the students took between half to three lessons to compose; • two engaged students in composition as a class and two worked with students in small groups or pairs which resulted in interaction with others in the classroom and composition by committee; • students of two teachers adopted titles which were relevant to the composition; • one noted that students worked from sound to symbol, one both ways and one did not address the question; • one composed with the students in the classroom; • two improvised; • all offered their students keyed percussion e.g. metallophones on which to compose and play; • two teachers conducted, at times employing an audible pulse and one built the conducting role into the compositions; • all felt that their students played mainly from notation; |
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- two teachers submitted only one recording of performances of student works while one submitted six recordings;
- all valued recording student work for self-reflection;
- all teachers adopted a largely student-centred approach with the exception of one working with the 15 year age group who led students to compositional expansion through her own improvising;
- I interpreted the roles adopted by all teachers to not actively be that of enablers, allowing and encouraging students to explore as they composed. Instead they largely adopted the roles of teacher as student and instructor, with two focused on other teaching issues and one, teacher as composer, trialing a short two-lesson module of the project material with a class.

Outcomes:

- the student compositions of both teachers developed several musical parameters, predominantly construction, but not structure;
- all teachers submitted a number of criticisms of *The Pulse Music Album's* content, plus some positive comments;
- all teachers were positive about their engagement with the project material;
- the students of all teachers expressed mixed responses to their engagement with the project material;
- all teachers expressed interest in using the material again in the future.