

Appendix 7

Appendix for Chapter Seven 12 year age group

Teacher No. 33

Teacher profile No. 33: female music teacher in a Sydney selective public high school – 12 (and 15) year old age group	
Identification	
Teacher: No. 33 – music teacher, selective public secondary school Gender: female Study age group: 12 (and 15) years School location: Sydney, NSW Study project(s): Phase Shifting Study timing: 1991 Scores and transcriptions: 33.1 – 33.7 Recording(s): CD 7 Tracks 1 - 7	
Education, preference, experience	
Qualifications: Dip. Mus. Ed.; B. Ed.; M.Ed.; M.Ed. Admin. Preferences (experience) –	
Music Activities: Play an instrument Sing Write/arrange music Listen to music Read books on music Administer professional association for music educators in the classroom. Write teaching kits for SSO and Musica Viva Education programs.	Preferences (experience) - Musical styles: Western classical music – pre 20thC Western classical music – 20thC Pop/rock Jazz Minimal music New Age music Music of other cultures
Years of teaching experience: 10 Years of teaching in this school and ages taught: 10 years – 14 to 18 year old students Years of experience teaching the age group of the study: 2 Experience teaching twentieth century art music styles: Mostly current Australian – Edwards/ Meale/ Sculthorpe/ Brophy as well as retrospective 20thC view – Impressionism/ minimal/ serial/ aleatoric – just another branch of repertoire for students to experiment with. Experience teaching music of other cultures: Greek/Indonesian/African/ Balkan/ Japanese – elements examined and compositional devices become new tools/vocab for students.	

<p>Teaching environment</p> <p>School - School situation: Sydney, NSW Public or private: public – selective How long has the school been open: since 1848! Level: secondary Number of students: 1080 Socio-economic background of parents: professionals/academics/media personalities/politicians/inner city dwellers/NESB School's interest in music: strong Venue and resources: music room – carpeted. No desks, no chairs – wonderful view over Sydney to the mountains. Not particularly well equipped – some guitars, some keyboards, some melodic percussion, 'skungy' old drum kit, mostly students provide own instruments. Curriculum: State curriculum, own program based on curriculum guidelines established by state education authorities. Curriculum ranking of music activities: I don't believe current curriculum ranks or emphasises – encourages integration – perf/comp/music/aural: 1. Improvisation/composition/arranging; 2. Aural training; 3. Singing; 4. Recorder/instrument playing; 5. Movement; 6. Music history/musicology; 7. Notation skills; 8. Music in society/in the community.</p> <p>Class profile: Music background of the class: Year 7 – non-elective music class. Students 14 to 15 years of age, with 15 years the average age. 50/50 males and females from memory. All students play an instrument to a level of reasonable proficiency. Most participate in bands/chamber groups/ or vocal ensembles/ choirs at school. Some AMEB 'graduates'. Music lessons: 5 x 40 minutes lessons per week.</p>
<p>Teaching approach - Teaching philosophy: Integrated approach – combining performance/ composition/ musicology/ aural. Across eclectic range of repertoire, using a variety of methodologies – Orff/ Kodaly/ Dalcroze. Development of aural perception paramount. Personal ranking of music activities: same as curriculum ranking Pitch terminology and systems: moveable doh Harmonic terminology and systems: through exploration of other composers' work Rhythmic terminology and systems: own version of French time names Evaluation and assessment: Required as accountability measure/ school/ faculty etc. Variety of means according to task/skill being assessed: - objective listening tests - individual and group compositions - individual and group performances - essays/seminars etc.</p>
<p>Project name: Phase Shifting Number of lessons: 4 x 40 minutes</p>

Familiarity of material: Familiar - by providing students with raw materials enables them to experiment – outcomes open-ended.

Objectives: recognition of this technique in work of others (aural and written recognition);

Experiment with this device in own composition.

Music skills/activities: vocal, instrumental, movement skills.

Technology – recordings of minimalist music: prerecorded excerpts played; Steve Reich was in town!

Composing activities –

Sound and symbol: most definitely worked from sound to symbol, although more experienced students preferred to play around with the figures on paper first.

Discussion of structure/form: yes

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

Compositions – original: written by the students

Compositions – time taken to write: 2 lessons – one to work through structured activities then one to apply the steps

Composition – the process: All options [in the project] attempted. Students actually came to these themselves through experiment.

Composing as an incentive to the students' music learning: Yes, they are very 'product' oriented.

Student composition titles: They are in the habit of cataloguing their works with opus numbers – nothing so imaginative as a name?!

Performance –

Performing from notation, by ear, by memory: Various methods. Phrase used initially from notation but as group worked by ear/memory.

Improvisation: yes

Pulse: Sometimes. Initially it was difficult but gradually they got the 'hang' of it.

Appraisal, evaluation –

Recording student work: yes

Response to the minimalist project – students: The students enjoyed working on the project enormously.

Response to the minimalist project – teacher: Always looking for new ways into new repertoire.

How the project(s) fitted into the music programme: Music program should always be flexible – certainly a place for them!

Ability to achieve a balance between various music activities and concepts: Valuable stepping stones provided.

The album of projects –

The projects as a sequential programme: Yes, some of the instructional language could be simplified for primary teachers.

Age group suited to the projects: Primary - Phase Shifting - rhythms / Music Weaving, Add and Subtract, Canon;

Secondary – Phase Shifting – rhythm and melody, Harmonic Prisms, Add and Subtract, Music Weaving, African, Gamelan.

Strengths and weaknesses of the projects: Would like to see activities related to specific discography/scores used as follow-up.

Future use of project material: Certainly the phase shifting – looking forward to opportunity to try others.

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

33.1, 33.2, 33.3, 33.4, 33.5, 33.6, 33.7

* Pulse music Recorder							
R. II							
✓ 1) Eric	□ □ □ □ □						
✓ 2) Lynda	□ □ □						
	D AA FF D						
✓ 3) Lisa	□ □ □ □ □						
	DDD AA FF						
✓ 4) Mauro	□ □ □						
✓ 5) Neil	□ □ □ □ □ □						
✓ 6) Tolben	□ □ □ □ □					* Gamelan sounds	
✓ 7) Leighton	□ □ □ □						

1.	composed by individual female students	3.	transcription of performance of each piece below
2.	score submitted by teacher		

33.1

1.	composed by student	6.	crotchet = c.63
2.	performed with metallophones, xylophone and piano	7.	score transcribed by researcher
3.	introductory section, repeated middle section, two-bar ending	8.	one complete take – inaccurate performance with parts out of sync with each other
4.	expansion of structure	9.	CD for Appendix 7 Track 1
5.	playing time 24 secs		

33.2

1.	composed by female student	6.	crotchet = c.68
2.	performed with metallophones, xylophone, recorder and piano	7.	score transcribed by researcher
3.	anacrusis of layers 2 and 3 played in previous cell	8.	one complete take – steady pulse, accurate performance
4.	expansion of structure	9.	CD for Appendix 7 Track 2
5.	playing time 41 secs		

33.3

1.	composed by female student	6.	crotchet = c.48
2.	performed with recorder, glockenspiel, piano and untuned percussion	7.	score transcribed by researcher
3.	changing numbers of repetitions; triangle enters in second cell with untuned percussion	8.	one complete take – steady pulse, some inaccuracies
4.	development of pulse and rhythm	9.	CD for Appendix 7 Track 3
5.	playing time 1 min 1 sec		

33.4

1.	composed by male student	6.	crotchet = c.41-46
2.	performed with piano, cymbal and bass drum	7.	score transcribed by researcher
3.	changing numbers of repetitions	8.	one complete take – different pulse in each layer
4.	development of pulse, rhythm, instrumentation	9.	CD for Appendix 7 Track 4
5.	playing time 55 secs		

33.5

The musical score for piece 33.5 is written for four staves. The first system (measures 1-4) is marked '1' and 'x2 glockenspiel'. The second system (measures 5-8) is marked '3' and 'x3'. The third system (measures 9-12) is marked 'x2'. The fourth system (measures 13-16) is marked 'x2'. The instruments are labeled as 'glockenspiel' and 'recorder'.

1.	composed by male student	6.	crotchet = c.68
2.	performed with piano, cymbal and bass drum	7.	score transcribed by researcher
3.	changing number of repetitions	8.	one complete take – accurate performance
4.	expansion of structure	9.	CD for Appendix 7 Track 5
5.	playing time 41 secs		

33.6

"Gamelan sounds"

The musical score for piece 33.6, titled "Gamelan sounds", is written for two staves. The first system (measures 1-5) is marked '1' and 'x5 glockenspiel'. The second system (measures 6-17) is marked 'x12'. The third system (measures 18-19) is marked 'x2'. The instrument is labeled as 'metallophone'.

1.	composed by male student	6.	crotchet = c.80
2.	performed with metallophones	7.	score transcribed by researcher
3.	changing number of repetitions, pitch set phase shifted once (not the rhythm)	8.	one complete take – effective performance
4.	expansion of phasing concept	9.	CD for Appendix 7 Track 6
5.	playing time 55 secs		

33.7

1.	composed by male student	6.	crotchet = c.93
2.	performed with cymbal and drum	7.	score transcribed by researcher
3.	no audible phase shifting	8.	one complete take – steady pulse
4.	simplification of structure	9.	CD for Appendix 7 Track 7
5.	playing time 46 secs		

Teacher No. 91 – further profile information in 9 year age group

Profile of Teacher No. 91: female primary music teacher in a Sydney private boys' school – (9) and 12 year old student age group. Information on Identification, education, preferences and experience, teaching environment plus personal beliefs in, and teaching perspectives of, music education is located in Appendix 6.

Scores and transcriptions: 91.5 – 91. 13

Recording(s): CD 7 Tracks 8 and 9

Teaching environment

Class -

Class age: 11 to 12 years.

Gender of class: male – 6th class 28 students

Class level: 6th class.

Class mix: mixed ability

Music background of the class: 6th class have had 3 or 1 years with music classes twice a week at that school.

Number of music lessons for project class per week: two

Length of lesson: forty minutes

Project name : Phase Shifting

Number of lessons: 4 to 6 lessons with 6th class students

Familiarity of material: Unfamiliar

Objectives:

12 year age group – class 6: to score read, perform independent parts, to compose their own scores;

to encourage students to improvise via using minimal techniques with voice, recorder, percussion.

I did not follow it through sufficiently to achieve this objective. We enjoyed the

performances but they were all prescriptive.

Collaboration/integration: no

Technology – recordings of minimalist music: not played.

Composing activities -

Sound and symbol: symbol to sound

Structure/Form: not discussed

Compositions - original: students and teacher

Compositions - time taken to write: students asked to write a rhythmic cell for homework .

Composition – the process: phase shifting process applied to the rhythms

Student Input: students chose dynamic levels.

Student composition titles: students gave titles to the phase shifting pieces that evolved from their rhythmic cell.

Performance –

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

Improvisation: No.

Conducting: I did conduct.

Appraisal, evaluation –

Recording student work: yes. {The cassette contains performances of *Take Your Time* and *Raindrops*. Instrumentation included voices, and voices with percussion}.

Responses to the project material -

Response to the minimalist projects – students: Yes they enjoyed the material, but had they gone on to the improvisation stage they would have enjoyed it much more. They found minimalism, Phase Shifting, too much of a ‘system’.

Response to the minimalist projects - teacher: I found the project material stimulating. The students enjoyed the material but I felt I could have done more creative things with them and the material. I found minimalism was too much of a ‘system’.

Researcher’s observation of a class based around Phase Shifting

1. students in 6th class had been given a homework task of composing a one bar cell using rhythm and pitch;
2. with the researcher present at one of the classes, 6th class students were shown how to phase shift their cells;
3. some short phase shifting pieces were performed with input on dynamic levels from the students;
4. the performances were undertaken with clapping or chopsticks played on desk tops from notation;
5. *Wind Chimes* used as a model for composition with defined pitch sets. (The piece was probably performed in a previous lesson although there is no written information about this);
6. Students wrote pieces, many in compound time, using 4 or 5 note pitch sets, and pitch sets different from those in the album;

7. The pieces were written for recorders, metallophones, and a combination of piano, xylophone and recorders;
8. Titles were added to pieces – *Take Your Time, Raindrops, Dreaming*;
9. Two pieces were performed, one on recorders, one on metallophones.

Compositions associated with Teacher No. 91 written in response to the Phase Shifting project

91.5, 91.6, 91.7, 91.7, 91.8, 91.9, 91.10 – phase shifting with untuned percussion

91.5



91.6

91.7

91.8



91.9



91.10

1.	composed by individual male students	3.	91.5 pastiche 91.6 development of construction, metre 91.7 development of construction 91.8 development of construction, metre 91.9 pastiche 91.10 development of construction, metre
2.	some compositions were performed with chopsticks struck on the back of a chair by students – 4x each cell	4.	score by researcher

91.11, 91.12, 91.13 – phase shifting with pitch

91.11

Take Your Time

The musical score for 'Take Your Time' is written for two staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a time signature of 12/8. The music consists of a sequence of eighth notes, with a first measure marked '1' and subsequent measures marked 'x4'. The bottom staff also begins with a treble clef, a key signature of one flat, and a time signature of 12/8. It features a sequence of eighth notes, with measures marked 'x4'.

1.	composed by male student	6.	dotted crotchet = c.40
2.	performed on recorders by students	7.	score transcribed by researcher
3.	cell repeated four times	8.	accurate performance
4.	playing time 2 mins	9.	CD for Appendix 7 Track 8
5.	development of instrumentation		

91.12

Raindrops

The musical score for 'Raindrops' is written for two staves. The top staff begins with a treble clef, a key signature of one flat (B-flat), and a time signature of 12/8. The music consists of a sequence of eighth notes, with a first measure marked '1' and subsequent measures marked 'x4'. The bottom staff also begins with a treble clef, a key signature of one flat, and a time signature of 12/8. It features a sequence of eighth notes, with measures marked 'x4'.

1.	composed by male student	6.	dotted crotchet = c.40
2.	performed on metallophones by students	7.	score transcribed by researcher
3.	cell repeated four times	8.	performance began accurately then players moved out of sync creating a sound similar to that expected by Rzewski in performances of his score <i>Les Moutons de Panurge</i>
4.	development of pitch	9.	CD for Appendix 7 Track 9
5.	playing time 2 mins		

91.13 *Dreaming*

Dreaming D, E, G, A.

Piano + xylo + recorders

1.	composed by male student	3.	development of metre, pitch and instrumentation
2.	scored for xylophones, piano and recorders	4.	score by teacher

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 – 12 year age group

Study timing: February to June 1990

Scores and transcriptions: 98.1 to 98.5

Recording(s): none

Education, preference, experience

Qualifications: B.Mus Ed., A.Mus. A.

Preferences (experience) –

Music Activities:

Listen to music

Attend concerts

Preferences (experience) -

Musical styles:

Western classical music pre-20thC

Western classical music 20thC

Pop/rock

Jazz

Musicals

Years of teaching experience: 15 years

Years of teaching in this school and ages taught: 8 years – years 7 – 12 (c12 – 18 years of age).

Years of experience teaching the age group of the study:

8 non-elective – mixed – some just this year, others for a year and a half;

Experience teaching twentieth century art music styles: Avante-garde – musicology with year 10.

Experience teaching music of other cultures: Philippines, Japan, India – musicology.
Teaching environment
<p>School - School situation: Sydney, NSW Public or private: public boys' school How long has the school been open: 75 years Level: Secondary Number of students: 720 Socio-economic background of parents: mostly middle to upper middle class School's interest in music: The school's interest in music is strong – ensembles: concert band, orchestra, choir, stage band and assorted chamber groups from time to time – boys from non-elective music classes very often in ensembles – school musicale and musical each year – performance night for each year as well. Extra-musical activities: 50's rock 'n roll dancing group Venue and resources: music room. The school is well equipped – CD players, record player, tape machine, recorders, metallophones, glochenspiels etc. Curriculum: New South Wales curriculum Curriculum ranking of music activities: Unranked - Notation skills, aural training, listening, music history/musicology, music in society/in the community.</p> <p>Class – Class age: 8 non-elective 13–14 years, average age 14 this year - 12 year old study group; Gender of class: 8 non-elective has 25 male students Class level: 8 non-elective; Class mix: 8 non-elective – mixed musical ability – academically above average Music background of the class: 8 non-elective – most have had primary school basis and a lot have learnt recorder and an instrument some time. Number of music lessons for project class per week: 8 non-elective – one Length of lesson: 53 minutes</p>
Personal beliefs in, and teaching perspectives of, music education
<p>Personal ranking of music activities: 1 singing; 2 music history/musicology and music in society/in the community; 3 aural training and improvisation/composition/arranging.. Pitch terminology and systems: sol-fa – Kodaly when class has particular trouble. Rhythmic terminology and systems: French time names, again when class has difficulty. Evaluation and assessment: Assignments, tests, performance, concert attendance. Preliminary opinion of The Pulse Music Album project material: The projects will fit quite comfortably into the music programme owing, not only to the way I teach, but also because of the nature of the beast who attends the school.</p>
Approach and strategies adopted to introduce material from <i>The Pulse Music Album</i>
<p>Project name: Phase Shifting – February 1990. Students of year 8 (2nd year non-elective secondary school class), study age group 12 years. Number of lessons: around 8. Familiarity of material: Not familiar.</p>

Objectives: My main objective of the exercise was to ascertain whether anything had sunk in from Year 7. It was interesting to note that they had difficulty reading the rhythms accurately and in fact keeping a constant tempo.

Music skills/activities: No particular skills.

Composing activities –

Composition pieces/exercises from *The Pulse Music Album* projects: material mostly from the album. I left the compositions until the last unit. I guess I felt they weren't capable or entrenched in the style required. This was probably wrong of me.

Student input: None.

Performance –

Performing from notation, by ear, by memory: Well, this was interesting what discoveries were made here. Combinations of notation reading, by ear or by memory were used by about 25%; by ear and notation by 30%; the rest actually read 'red' the music, for better or worse.

Improvisation: No improvisation.

Response to the minimalist project – students: "Different"; "you're joking"; "this is fun – playing instruments"; "I can't do this, I've never learnt an instrument", however all enjoyed doing each task.

Response to the minimalist project – teacher: Enjoyed working with this project.

Project name: Harmonic Prisms - April, May, June 1990. Students of year 8 (2nd year non-elective secondary school class), study age group 12 years.

Number of lessons: It seems like an eternity because of interruptions and the size of the classes (25 students).

Familiarity of material: Certainly not familiar with non-elective music.

Objectives: Basically to compose in the style, a new experience for them.

Composing activities –

Sound and symbol: Varied group to group. One group wrote symbol to sound, the others sound to symbol initially. Thence gradual combining of both as if Dawn Broke.

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

Compositions – original: yes.

Compositions – time take to write: Varied according to group and class. Average time probably 2 periods.

Composing as an incentive to the students' music learning: Composing was indeed an incentive. The correlation between notation and how to use it was worthwhile, putting theory into practice.

Student composition titles: yes

Performance –

Performing from notation, by ear, by memory: As before – however because of the previous unit I think that more to them played by, in fact, reading the notation.

Conducting: Yes I conducted when needed – at times had a conductor from the class.

Appraisal, evaluation –

Recording student work: In some instances yes, however we ran out of time, hence you have the written word.

Response to the minimalist project – students: Enjoyed very much so!

Response to the minimalist project – teacher: Indeed I did enjoy working with this project!

Teacher's response to project material from *The Pulse Music Album*

How the project(s) fitted into the music programme: I guess I made room for the projects because I have in fact never done anything like this before. It was a challenge however unfortunately because of our musicals and preparation for our musical 'Orpheus', I seemed to lose track of it.

Music lessons planned in advance or immediate: I planned the lessons in advance. I knew after receiving the 'pulse album' what I was going to do.

Minimalist projects outside the classroom: No.

Ability to achieve a balance between various music activities and concepts: I think I struck a balance. I don't think there was any area that I wouldn't work with. The nature of the child I work with helps.

Role of the cassette player: The cassette player was not particularly useful. In the 'macro' sense yes, micro, no.

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

The album of projects –

The projects as a sequential programme: Yes I feel they would work sequentially. Because of the step by step process more or less presented. Basically that's why I did the topics I chose. Although I should have taken examples from each unit and followed through in a more organised fashion.

Age group suited to the projects: Well, I think they're valuable in music education because of what 'they' in fact teach. What one uses and how, would depend on the music background of students.

Strengths and weaknesses of the projects: I think what is expected at times is a little unrealistic. This school is a selective high school and on occasion they had difficulties. Strengths obviously are the opportunity to compose and read and perform music with a group. Often the amount of control demanded e.g. tempo, is also good.

Future use of project material: I would certainly use them in the future – invaluable. I think perhaps *The Prism* unit was the most rewarding because of the relationship the students could see between the music and composition. As you will probably observe, I've handed to you bulk rather than quality.

Teacher's response to minimalist project material: this was fun! Year 8 non-elective are still working on compositions hence they are not included. The second Year 8 non-elective was much slower in working through, hence I deleted them.

Students' response to minimalist project material: No particular responses as far as I can ascertain. Perhaps the Year 9 elective class found it tedious.

98.2 Pigsy

Page 1

THE STORY.
 In the beginning primal chaos reigned. Heaven sought order but the budgie can fly only when its feathers are grown. The fall worlds formed again and again. A great rock egg, all in creation, became magically fertile. And from it came a stone egg pig, the nature of pigsy was irripresable.
 His travels brought him to the four corners of the earth, and he came upon three weary travellers, a monkey, fish monster and priest. And with his magic wishing rake he tore them to pieces, ~~and~~ skinned the monkey for magical thermal underwear, and the priest's robes for toilet paper. Until one day he came upon a DOG SPIRIT. do da da! boom boom boom boom.

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Pigsy
 He seeing the dog spirit utter ugliness he became sick with disgust. And the fight began. Pigsy BASH in 12 years of fighting past cracks, smash, cracks. Their battle brought them to hell. The elephant god, not liking the noise stepped the lowly dog and kicked pigsy in the nose. Thus ~~thus~~ why dogs walk on four legs being pigsy, pig pulled the elephant's nose. The God fled in terror swinging his great wishing rake an WHAM!!! accidentally killed Buddha, watched closely. Spreading his guts over the rock was the world. Thus man became man. He Pigsy became Lord of Heaven and thus ruled the universe.

Page 3



98.3 The Woes of School Page 1

The Woes of School
 The roll call bell rings, it's almost 9 o'clock
 It's now 8:55
 As I strolled through the B3 door, I wonder
 if anyone will listen to Mrs Fisher today.
 The equally annoying, Ben Heroghuly & his Taylor
 were sent out once again. No-one listened to
 Fisher again. A pleasant sound came upon me,
 the bell, it's now 9:53
 As Hilditch babbled on, about Geography, most
 of the class caught up on their sleep. A
 little while later I was woken by a scinted bell
 It's now 10:47
 Recess!!
 At 11:06 I headed for B14. We were prepared
 for more of Ward's bad jokes. We would
 retaliate with a ~~own~~ reply with: Did you polish
 your head this morning.
 It's now 12:00. We had a wonderful period with Mr
 Jord today. Creating music, songs, dances and all

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sorts of other wonderful things. Only kidding
 Next is lunch, then Latin, and English again.
 Another day, these are the woes of
 school.

Page 3

THE WOES OF SCHOOL

CHORD PATTERNS

98.4 The African Pygmy Mushroom Growers

Page 1

Topic African Pygmy Mushroom Growers

Before the ~~era~~ of Mr. Joel
 The pygmies roamed the world
 with many powers including the
 power to grow orange pumpkins

They grew the best creamy orange
 pumpkins in the world
 They gave the ~~secret~~ secret to
 Mr. Helinger & Mr. Campbell for them
 to put in their creamy pumpkin soup

They wouldn't share the royalties with
 the other earth dwelling creatures
 The CEO got angry and punished them
 severely

They sponsored him and continued to
 grow their designer pumpkins
 The attempts failed and everyone
 now had the secret as The CEO
 had spread the secret.

Page 2

They were so angry they used the royal
 army to buy all the pumpkins in the world
~~to~~ The world was deprived of
 the creamy orange designer pumpkins
 The first great pumpkin famine.

The CEO was angry at the pygmies for their ~~self~~
 He struck down the pygmies leaving ~~up~~ few
 They ~~stranded~~ ~~and~~ ~~was~~ the world until they reached
 Africa where The CEO decided their punishment
 "to die here in confinement and tend the vast
 with fleshy fungi field which shall call mushrooms."
 "You will continue to farm these mushrooms (which can
 be eaten with a variety of sauces, dips and food etc, etc.)
 for the rest of your life.

The pygmies to this day are still farming the mushrooms
 and they will be available in stores next month
 so decreasing the world's dependency on
 creamy orange designer pumpkins.

1.	composed by individual male students	4.	scores written by individual students
2.	instrumentation: 98.1 two xylophones, piano and speaking voice 98.2, 98.3, 98.4 unspecified melodic instruments and speaking voice 98.5 two xylophones, bass xylophone and speaking voice	5.	98.2 incomplete score submitted
3.	98.1 expansion of structure, pitch (bitonal harmony), development of text 98.2 development of text 98.3 development of rhythm and text 98.4 development of text, pitch (harmony) 98.5 development of text		

Teacher No. 100

Profile of Teacher No. 100: female music teacher, country New South Wales, Australia, public high school – 12 (15,18) year old student age groups	
Identification	
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) Study timing: May 1990 Scores and transcriptions: 100.1 – 100.3 Recording(s): CD 7 Tracks 10 – 12	
Education, preference, experience	
Qualifications: B.Mus(Ed); ATCL.	
Preferences (experience) – Music Activities: Play an instrument Sing Write/arrange music Improvise music Dance when possible Listen to music	Preferences (experience) - Musical styles: Western classical music pre 20thC – some Western classical music 20thC – some Pop/rock Jazz Musicals Middle-of-the-road music Folk Music of other cultures All kinds – bits and pieces

<p>Years of teaching experience: 14 years</p> <p>Years of teaching in this school and ages taught: Teaching at this school for 3 years. 11 to 18 year old students taught.</p> <p>Years of experience teaching the age group of the study: 8 years.</p> <p>Experience teaching twentieth century art music styles: Reich, Glass, Crumb, Australian Contemporary for the Australian topic in the syllabus, Sculthorpe, Meale, Sitsky, Butterley.</p> <p>We do lots of 'aural' work and use as many contemporary composers as possible so we cover a lot of areas but not in great details (except the Australian composers).</p> <p>Experience teaching music of other cultures: Indonesia/Bali, African, Latin American, English/American/Greek folk music, Aboriginal music.</p>
<p>Teaching environment</p> <p>School -</p> <p>School situation: country New South Wales</p> <p>Public or private: public</p> <p>Level: Secondary</p> <p>Number of students: approximately 540</p> <p>Socio-economic background of parents: farm workers; average work and some parents are professionals in Newcastle; many parents work out of town i.e. travel to Maitland/Newcastle to work; many students from split families.</p> <p>General information about the school: Students are only just being exposed to lots of other styles of music. Often very narrow in their appreciation of music, but hopefully we are going to remedy that. Not much peer support. Students don't compliment each other much particularly the non-musicians. Choir members dread the thought of performing for their peers which is a shame.</p> <p>School's interest in music: The school's interest in music in medium to strong and gaining. Much more activity in the last two years. 50 in choir and 60 or more in over-all groups. 14 learning woodwind privately and approximately 8 on brass. Strong from administration – weaker from certain departments who may find it an interruption to their lessons (e.g. science). Choir, senior vocal group, junior vocal group, rock group, instrumental (band).</p> <p>Venue and resources: Music room. This is a small room which also serves as my classroom. We moved the desks out to accommodate more space and now have carpet and only chairs – much better. Quite well-equipped. I have a stereo, cassette deck, percussion instruments pitched and unpitched, brass instruments, flutes, clarinets and 2 saxophones and a new piano. Plus rock band gear and a drum kit.</p> <p>Curriculum: State and school curriculae.</p> <p>Curriculum ranking of music activities: 1 listening; 2 aural training; 3 improvisation/composition/arranging; 4 singing; 5 recorder/instrument playing; 6 movement; 7 notation skills. Music history/musicology tie in with 1 and 2. Music in society/in the community – not mentioned.</p> <p>Class –</p> <p>Class age: year 7 = 11 to 12 year age group 9 {Students at a number of class levels and</p>

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}.

Class level: two year 7 classes

Number of music lessons for project class per week: 6 x c36 minutes.

Personal beliefs in, and teaching perspectives of, music education

Teaching approach

Teaching philosophy: Main Aim: to allow any student the opportunity to experience any kind of music in a learning situation and help them to know the pleasures of musical appreciation from basic to more complex understanding.

To widen the narrow listening skills of students. This is done through practical experiences both in individual and group situations.

TO FOSTER THE LOVE OF MUSIC. (Amazingly, some students do not ever listen to music and have no opinion on music of any kind).

Enjoyment is the essence of my classroom work. I try to make the atmosphere pleasant in the hope that the students will get as much out of music as possible – if they really have interest they will take it as a subject in year 9 and will also attend other music activities which are available.

Personal ranking of music activities: 1 singing; 2 movement; 3 recorder/instrument playing; 4 improvisation/composition/arranging; 5 aural training; 6 listening; 7 notation skills; 8 music in society/in the community; music history/musicology. This is so difficult as I'd like to have just 1,2,& 3.

Teaching method: Through practical workshops, individual, group activities.

This can begin with very basic sound workshops and composition/performance activities.

Graphic notation – lots of practical work to gain the students confidence – gradually moving toward more traditional notation and performance.

Each aspect of the syllabus can lead from practical work – they learn –

Aural/listening

Singing/playing

Composition PRACTICAL

Movement

Notation is found to be a necessary evil

Improvisation

Music history and music in society

We do lots of singing – even just for fun rather than always for a reason.

Year 7 – lots of graphic work, then into basic rhythm – rote pitch learning or using letters and rhythm – listening to what music is 'about'. Singing/and accompanying.

We cover the elements of music in more detail – mostly in a practical or aural way.

Pitch terminology and systems: I use a combination depending on the group e.g. year 10, 11, 12 would (should) know sol- fa and French time names.

Harmonic terminology and systems: Harmony work usually based on chords and triads. NB 2 Unit Course 1 does not have a great deal of 'theory' based work – the emphasis is on performance.

Rhythmic terminology and systems: French time names. Year 7 are only just

beginning rhythm so have only graphic notation...

Evaluation and assessment: This is required by the curriculum but I also choose to evaluate various things. This is undertaken through practical and written exercises and marking, lots of group work.

Preliminary opinion of The Pulse Music Album project material: I like all of the ideas and I'm sure I'll enjoy 'checking them out' to see how my classes like them. Some of the projects will fit into the overall plan e.g. Gamelan, African Rhythms, but others will be used in a 'space' between other activities – not enough time to correctly organise this into program due to earlier operation etc. Music is just a constantly busy subject and being only one teacher in a school means all the administration as well. I think the 'pulse' music would be good for senior electives in particular who are studying 20thC composition and styles and also year 7 as I have used it.

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

Project name: Phase Shifting 2 x Year 7 classes – 12 year old age group

Number of lessons: 4. Begun on 28 May, 1990.

Familiarity of material: Unfamiliar.

Objectives: Year 7 had not begun traditional rhythm notation as I hoped to just reinforce the ideas of rhythm before going onto notation. Spent Terms I and II on graphic work.

Music skills/activities: Rhythm games and echoes; singing; instrumental games and echoes. Call and response (question and answer); rote learning; listening and repeating (echoing).

Technology – recordings of minimalist music: I played the Steve Reich piece and part of Glass – they tried to hear what was happening but were restless.

Composing activities –

Sound and symbol: They worked from sound to symbol. One clapped a rhythm then the class put it into a grid for themselves then on the board to phase shift.

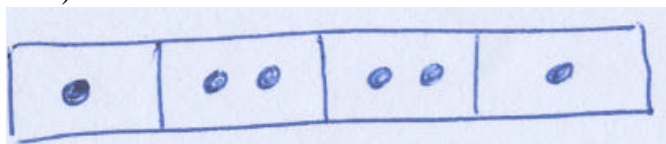
Discussion of structure/form: We discussed 'organisation' rather than form. Used words like ostinato and call and response.

Composition pieces/exercises from *The Pulse Music Album* projects: *Chitter Chat* as in the album.

Compositions – original: students.

Compositions – time take to write: It took only a short while to learn and phase shift.

Composition – the process: Year 7P - A simple rhythm on a grid was used and 'shifted'. Layer 1 played on shaking instruments; Layer 2 on hitting instruments and recorded (composition 100.1).



They realised when performing this backward that it was the same as forwards so tried a new rhythm to see if this was always the case (not so). Ostinato term introduced.

Group 1 – shaking; Group 2 - phase shifting

The rhythmic cell of 100.1 used as the basis for a call and response version. A boy (or 2) plays one bar (x2). All of the group play two repeats. This was too hard for some to play straight off. (composition 100.2)

Chitter Chat from the project was played and taped twice, the second time faster.

Year 7G. They found this much more difficult than 7P. Used the same ideas as 7P. Students invented a rhythmic grid:

•	•		•	•	•	•	•
•	•	•			•	•	•

Class discussion about : - how should it sound?? Answer by students – ‘at the same time’. Then how should we write it? . . ‘one after another’. Got rid of the

•	•		•	•	•	•	•
•	•		•		•	•	•

Class experiment and exercises.

Layer 1 chosen rhythm –

•		•	•	•
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Player 2 shifted the pattern. Composition 100.3 – tape of group 1 – messy; tape of group 2 not much better; taped group 2 again. Scrapped groups 2 and 3. Only 1 left. A much more restless class and it tells on the tape.

Student input: All rhythms were children’s invention.

Composing as an incentive to the students’ music learning: The students always enjoy doing ‘their own thing’ – they like to play any instruments and particularly like to record and listen to themselves.

Student composition titles: No titles, we just called it ‘phase shifting’ - it seemed to be understood well by the class.

Performance –

Performing from notation, by ear, by memory: Graphic notation (or memory if necessary).

Improvisation: Improvising call and responses.

Conducting: I did conduct – a child tried once and was mildly successful but with lots in

a room their place was lost quite often.

They worked well without a conductor (other than a student who couldn't keep his place). The tambour kept the pulse going.

Pulse: A pulse on tambour used to keep time crotchet, crotchet, crotchet, crotchet or minim, minim - easy to keep the beat going but hard to find a student capable of keeping an even tempo.

Appraisal, evaluation –

Recording student work: the students particularly like to record and listen to themselves. They could hear where their timing etc. lapsed.

Response to the minimalist project – students: They seemed to enjoy it for a while but needed lots of 'rearranging' i.e. swapping instruments etc. to keep them going.

Response to the minimalist project – teacher: Some parts of it – the idea is good and easy to get across – sometimes difficult to play.

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 –

The projects as a sequential programme: The projects could work as a sequential programme just as long as it wasn't too drawn out. The attention span in the classroom at all levels needs to be focused on an activity which takes a lot of thought and concentration.

Age group suited to the projects: Most of the early exercises would be of interest to younger students but not every day. I feel they may lose interest if it is done continually.

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

100.1 and 100.2 *Call and response*

Phase Shifting.



Layer 1 - shaking instruments

Layer 2 - hitting instruments

1.	composed by first class and teacher	6.	crotchet = c.120
2.	performed with shaking instruments and hitting instruments	7.	score submitted in teacher's hand
3.	100.1 each cell played twice 100.2 each cell played four times – twice with wood block soloist taking the rotating rhythm, and twice with drum taking the rotating rhythm	8.	one complete take of each piece – 100.1 generally accurate performance 100.2 some rhythmic inaccuracies
4.	100.1 development of structure, construction and time 100.2 expansion of structure, timbre development of construction recycled material from 100.1	9.	CD for Appendix 7 Track 10 100.1, Track 11 100.2 <i>Call and response</i>
5.	playing time 100.1 20 secs 100.2 40 secs		

100.3



1.	composed by second class and teacher	6.	crotchet = c.97
2.	performed with shaking instruments and hitting instruments	7.	score transcribed by researcher
3.	each cell played twice	8.	first of three takes – inaccurate playing
4.	development of structure	9.	CD for Appendix 7 Track 12
5.	playing time 22 secs		

Teacher No. 104

Profile of Teacher No. 104: female music teacher in a Sydney public secondary school, Australia -12 year old student age group.	
Identification	
<p>Teacher: music teacher No. 104 Gender: female Study age group: 12 years – secondary School location: Sydney Study project(s): 1. Phase Shifting 2. Phase Shifting Melodies 3. Add and Subtract. Study timing: June – July 1990 Scores and transcriptions: 104.1 – 104.3 Recording(s): CD 7 Tracks 13 and 14</p>	
Education, preference, experience	
<p>Qualifications: B.A., Dip.Ed. Preferences (experience) – Music Activities: Play an instrument (for fun) Write/arrange music occasionally Listen to music Sing in choir (but not last couple of years) Improvise music for fun, at home</p>	
<p>Preferences (experience) - Musical styles: Western classical music – pre 20thC Western classical music – 20thC (depends on style, composer etc) Jazz – Dixie Folk</p>	
<p>Years of teaching experience: 8 years Years of teaching in this school and ages taught: 8 years - Years 7 to 12 Years of experience teaching the age group of the study: 8 years Experience teaching twentieth century art music styles: on style, composer etc Various composers and styles. Depends whether we're discussing whole tone scale, instrumental timbres or vocal techniques such as sprechstimme. All three have been used from time to time, plus other modern Australian composers such as Sculthorpe...usually listening > discussion > analysing techniques. Experience teaching music of other cultures: African – year 8 do it as lead into jazz and rock; years 11 & 12 more thoroughly.</p>	
Teaching environment	
<p>School - School situation: Sydney, Australia Public or private: public How long has the school been open: since 1967 Level: secondary Number of students: 1322</p>	

Socio-economic background of parents: middle class. A proportion are upwardly mobile and from working class background but who have recently made money. A lot are very money-conscious. Though there are some who are having financial difficulties.

General information about the school: The music faculty gets a lot of support from the principal, but in return is expected to “perform” each year i.e. a musical, a showcase of talent, plus several HSC and general concerts.

Although very active musically it is rather frustrating to find a relatively small percentage of students participate. Often the same students are members of 2,3, or 4 music groups, whereas others equally talented participate in nothing. Rather a laissez-faire attitude among some.

Many students want to take Music as an elective subject, but are often not allowed to by their parents. Most parents are happy for students to take music up to year 10, but many do not allow their children to take it in senior years as they feel that only Maths, Physics, and Chemistry will get them marks and Music won't.

School's interest in music: Very strong interest in music in particular, and the Performance Arts in general. Have here 1 concert band, a couple of smaller instrumental ensembles – string group, guitar group - two rock groups (by audition), 1 choir, 1 vocal ensemble (by invitation), and 1 recorder group (by invitation). Private/group lessons are organised for flute, clarinet, sax, brass, guitar. Also a gamelan orchestra run by the Language Department. There are one or two concerts each term and HSC presentation nights, plus a “Showcase”.

Venue and resources: music rooms. Tape recorder, CD player, record player, pianos, organ (Casios for year 8 and above). Pitched percussion instruments (xylophone, glockenspiels, metallophones); unpitched percussion (triangles, tambourines, maracas, drums, castanets...).

Curriculum: School curriculum except for years 11 and 12.

Curriculum ranking of music activities: Junior years – 1 recorder/instrument playing; 2 singing; 3 notation skills; 4 aural training & improvisation/composition/arranging; 5 listening; 6 music history/musicology; 7 music in society/in the community; 8 movement. Senior years more difficult to rank – depends on student needs.

Class –

Class age: 12 years; 12 years 8 months. Age span 11 years 4 months, to almost 13; 11 years 11 months to 13 years 8 months.

Gender of class: 13 boys, 15 girls; 14 boys, 13 girls.

Class level: two x year 7 classes, secondary

Class mix: medium-highish ability. Ages range from almost 13 years down to 11 years 4 months; mixed ability – fairly average though 2-3 boys and 1-2 girls would be of superior ability and 1-2 boys a little below average.

Music background of the class: Mixed background as there are several different feeder schools. One in particular has a very good recorder programme in the school. Other students have not the slightest knowledge. Quite fascinating to know why they are so resistant to singing! Was very hard initially to get any sound out of them, but they are now improving considerably –especially the girls but there are quite a few droners still

<p>among the boys. It rather suggests that not much singing was done in some of the primary schools.</p> <p>Number of music lessons for project class per week: 5 x 50 minute periods over a two-week cycle.</p>
<p>Personal beliefs in, and teaching perspectives of, music education</p> <p>Personal ranking of music activities: Same as the curriculum - Junior years – 1 recorder/instrument playing; 2 singing; 3 notation skills; 4 aural training & improvisation/composition/arranging; 5 listening; 6 music history/musicology; 7 music in society/in the community; 8 movement.</p> <p>Teaching method: Variety – Pitch: graphic > standard pitch & solfa Rhythm: French time names and traditional notation Harmony: with year 7 basically soh-doh accompaniment and short ostinatos. Also some use of chime bar chords I, IV, V.</p> <p>Evaluation and assessment: My choice to assess although there are end of year tests for all classes. 1. General knowledge, musicology, notation, written exam; 1. Practical test 2. Aural and listening test.</p> <p>Preliminary opinion of The Pulse Music Album project material: Initially we intend allocating a block of time for the project material, and although we will be doing our routine topics as well.</p>
<p>Approach and strategies adopted to introduce material from <i>The Pulse Music Album</i></p> <p>Project name: Phase Shifting (June 1990)</p> <p>Number of lessons: 4 to 5 though not all of each lesson was given over to this, and pieces from this were played after Phase Shifting Melodies were started.</p> <p>Familiarity of material: Some similarities to ostinato pieces in the Orff style. I have used ostinato pieces extensively with children from 4-8 years and to a lesser extent in secondary school.</p> <p>Objectives: for <i>In Step – Out of Step</i> from the project a) Revision of crotchet, crotchet rest, two quavers, and double bar repeat sign, and fluency in reading various combinations of these; b) Experience in holding a rhythmic part; c) Working together as a group and <u>listening</u> to group as a whole; d) Following a score; For <i>I think it's going to rain</i> a) – d) as for <i>In Step – Out of Step</i> e) Addition of pitch revision, plus new note (G'); <i>Wind Chimes:</i> as for <i>I think it's going to rain</i> plus a) introduction to 12/8 time; b) revision of pitches d f a c;</p> <p>In general all the objectives were achieved and I found it to be excellent revision both rhythmically and pitch-wise. In particular the students developed and improved their rhythmic co-ordination. However with both classes (I ran it strictly parallel) we had some trouble keeping together as a group with each successive repetition. With a smaller</p>

number of repeats it worked quite well.

On the whole the students enjoyed it, especially hearing themselves on tape! However the taping took an unrealistically long time, due to our attempts to get a “perfect” performance – which for us, was another reason to reduce the number of repetitions. With the benefit of hindsight I would have spent less time on this and moved forward to new pastures. Had they been more advanced with the recorder the performances may have been better – xylophoned and pitched percussion instruments tend to highlight rhythmic imperfections.

Music skills/activities: I split the class into smaller groups so students could hear when each group got out of sync – was therefore a listening project too.

Technology – recordings of minimalist music: All of the excerpts on the tape played. Students’ responses were not over enthusiastic on the whole.

Composing activities –

Sound and symbol: Students were free to make up melodies how they liked, but a lot were experimenting with sounds as they played on the xylos etc. and then writing it down. Rhythmic compositions were usually clapped first and then notated.

Structure/form: The material tied in quite nicely with a unit we did with form – particularly when it came to discussing “motif” and “ostinato”.

Composition pieces/exercises from *The Pulse Music Album* projects - compositions – original: Initially I used the examples given then asked students to compose their own.

Compositions – time take to write: Took a couple of days.

Composition – the process: All students had to compose own pieces, but with quite a few there was lack of correspondence between what was written and how it was played. (Regret there are no scores or tapes).

Student input: Not much student input. Some students tried to write their own rhythmic compositions, but often their performance of their compositions was not what they had written, therefore a good learning process.

Composing as an incentive to the students’ music learning: Definitely. Especially when they had to try and play what they had actually written as opposed to what they thought they had written.

Student composition titles: On the whole no titles used.

Performance –

Performing from notation, by ear, by memory: Initially from notation put on the board as revision, but mostly from memory.

Improvisation: Used clapping improvisations over *In Step – Out of Step* pattern. Very successful with some students (not recorded). However there was a dichotomy in the class between those who could improvise freely and those who were terrible! With a couple of outstanding exceptions it was the boys who were terrible, particularly in 7E.

Conducting: For the taping I ‘conducted’ – the problem was persuading the student to lift eyes away from xylos etc. When I tried doing it without conducting (or with minimal conducting) they raced away and got faster with each successive repetition.

Pulse: For *In Step Out of Step* and *Chitter Chat* the pulse was initially crotchet, crotchet, crotchet, crotchet at the learning stage but was semi-breve (i.e. bar a time) for

performance. With both these classes this seemed more effective in slowing them down when they were racing. But no additional heard pulse for performances.

For *Wind Chimes* a dotted crotchet, dotted crotchet, dotted crotchet, dotted crotchet, pulse worked well – that is, a beaten pulse – not a heard pulse.

Technology – sound source: Tape of printed music. I don't seem to have tape of original compositions.

Appraisal, evaluation –

Recording student work: We particularly recorded as a class performance activity. Yes, we found it very useful and enjoyable. However, I didn't record as many individual compositions as I would have normally if circumstances had been a little different.

Response to the minimalist project – students: On the whole the students enjoyed working on this project. Comments ranged from “groovy”, “OK” “bit boring”, “too much the same”. In other words the whole gammut of responses, with most in the “quite like” “OK” area.

Response to the minimalist project – teacher: Yes I did, though I was frustrated by not getting a “perfect” recording each time and I too, at times felt it is too repetitive.

Project name: Phase Shifting Melodies (July 1990)

Number of lessons: circa 4

Familiarity of material: Development of ‘Phase Shifting’, obviously! Not really familiar though they did realise it was like using extended ostinatos.

Objectives:

- a) revision of $\frac{3}{4}$
- b) pitch revision of treble clef and introduction to G Bb C D in bass
- c) phrasing
- d) aural awareness of what the other part was doing.

Composing activities –

Discussion of structure/form: No discussion.

Compositions – original: Started one written by myself, but not recorded.

Compositions – time take to write: Not long at all. I jotted it down quickly, just to see for myself it it would be easy enough for the students to do (but didn't get around to setting it as class homework).

Student input: There was general discussion as to whether glochs and metal instruments should play one line and xylos the other, or whether the class should be divided into 2 mixed groups. Various combinations were tried.

Performance –

Performing from notation, by ear, by memory: Treble clef line from notation. The bass clef line I think they did basically from memory even though I initially planned for it to be an introduction to the bass clef.

Improvisation: none

Conducting: The teacher conducted. The students didn't get quite as far with this piece

– perhaps as a result of having worked with the previous phase shifting unit.

Pulse: No extra pulse was used.

Appraisal, evaluation –

Recording student work: The *Lazy, Lazy Boat* was performed and recorded, and the students enjoyed hearing themselves.

Response to the minimalist project – students: They enjoyed the *Lazy Boat* melody and the bass line was easy enough for them to learn very quickly.

Response to the minimalist project – teacher: yes. We all found this a very restful unit!

Project name: Add and Subtract

Number of lessons: c.3

Familiarity of material: unfamiliar

Objectives: reading irregular rhythms; pitch fluency.

Composition pieces/exercises from *The Pulse Music Album* projects: used only ‘Drum Talk’ and ‘Picket Fences’.

Performance –

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

Conducting: I conducted.

Pulse: there was no separate pulse, but I’d like to try it with fast pulse.

Appraisal, evaluation –

Recording student work: Only ‘Drum Talk’ was recorded but I’m not sure what happened to the recording of ‘Drum Talk’ with pitched percussion – not quite what was in mind.

Response to the minimalist project – teacher: This was rather rushed as I was about to go overseas, so although the students played *Picket Fences*, it wasn’t recorded.

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

How the project(s) fitted into the music programme: I made room for the projects, but where possible incorporated them into other set topics (e.g. form). On the whole I tended to regard it as a unit in its own right.

Music lessons planned in advance or immediate: Overall I made a rough plan, then worked from one week to the next as I wasn’t sure how long it would take. From time to time there was other things which had to be done, so they too were done in the lessons.

Ability to achieve a balance between various music activities and concepts: As far as I was concerned this project tended to be instrumental rather than vocal, though there is no doubt it could work very well as instrumental and vocal. Didn’t attempt to analyse it harmonically with the students. Rhythmically we found it quite easy and we did use sections as exercises in pitch notation.

Role of the cassette player: I found the cassette player useful not so much in direct teaching but very useful to let students hear what their own performances were like.

They could clearly hear, for instance, how they tended to race in *Chitter Chat*.

Student reaction to minimalist excerpts on the kit's cassette tape: The students were not so interested in these excerpts in a general way. Many felt very strongly that if it wasn't rock, it wasn't music! (In spite of the fact they had had different styles of music played in lessons!). On the other hand those that called them "Yuk" (!) tended to be the noisy loud-mouths who are always the most outspoken.

The album of projects –

The projects as a sequential programme: I certainly feel that the projects I did (Phase Shifting and Phase-Shifting Melodies) were a logical extension.

Age group suited to the projects: The beginning ones, *In Step*, *Chitter Chat*, *Going to Rain* would be quite suitable for primary classes.

The 'Phase Shifting' and 'Phase Shifting Melodies' could be made as simple or as sophisticated as necessary.

Strengths and weaknesses of the projects: One of the strengths of Pulse Music is that even lower ability students and students without formal training on an instrument can participate on almost the same level as the more advanced students. At the same time the more advanced students can also be extended.

In addition the more creative students can write/perform pieces with quite complex textural qualities long before they have mastered traditional harmony or counterpoint.

Although I have not tried it with year 11 students, I think it would be excellent for music composition exercises for 2 Unit 1 students who do not have a formal music background, and also very good as an example of twentieth century techniques for the 2 Unit Related students.

For compositions and units for performance the teacher must be aware of the value of other musical elements (such as timbre and dynamics in particular) to create interest and avoid monotony. And perhaps the number of repetitions of each section could be modified by mutual agreement according to the mood etc. that is desired.

As with any "new" idea it is after all just that – just another new idea from which elements may be taken and used and blended with pre-existing ideas to form the next stage in the musical chain of development.

This is certainly a valid teaching-learning strategy which could well be incorporated into standard classroom usage. However, while I certainly appreciate that this is not a music of development (leading to) tension (leading to) relaxation, I do rather feel that the large number of repetitions of each bar and the apparent "sameness" that results, leave a "going nowhere" feeling – which is fine, providing it is balanced by the more traditional tension-resolution type of piece. In other words, to state the obvious, Pulse Music should not displace traditional music, but rather should be used as a very useful and valid adjunct to classroom teaching.

Future use of project material: I would certainly use them again in future teaching, but next time I would plan for more emphasis on students' own compositions, and I would incorporate more vocal work.

Teacher's response to minimalist project material: I enjoyed working with the projects. We enjoyed the Phase Shifting Melodies best on the whole.

Students' response to minimalist project material: On the whole I think the students enjoyed it and I think they enjoyed the Phase Shifting Melodies best.

Compositions associated with Teacher No. 104 written in response to the Phase Shifting Melodies project

104.1 *Melody Shifting*

Melody Shifting

Repeat 4/5 times

1.	composed by the teacher	3.	score submitted in teacher's hand
2.	development of pitch set		

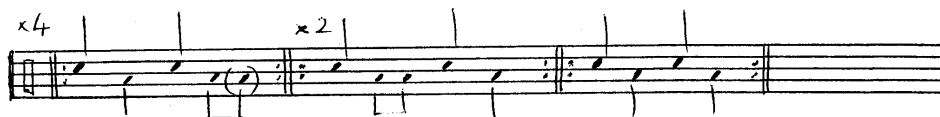
Compositions associated with Teacher No. 104 written in response to the Add and Subtract project

104.2

x 4

1.	composed by class and teacher	6.	crotchet = c.124
2.	performed by clapping	7.	score transcribed by researcher
3.	each cell played four times; sounds as if one group of clappers played the piece as a single line	8.	last of three takes – steady pulse, accurate performance
4.	simplification of pitch and timbral aspects of the process as presented in the project	9.	CD for Appendix 7 Track 14
5.	playing time 14 secs		

104.3



1.	composed by class and teacher	6.	crotchet = c.136
2.	performed with two groups of untuned percussion	7.	score transcribed by researcher
3.	cells repeated different number of times	8.	first of two takes – steady pulse
4.	simplification and annulment of additive process	9.	CD for Appendix 7 Track 15
5.	playing time 22 secs		

Teacher No. 116

Profile of Teacher No. 116: female composer-in-schools at two New Zealand schools - 12 (and 15) year old student age groups.

Identification

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):
 Canon – 12 year old age group
Study timing: March and April 1990
Scores and transcriptions: 116.1
Recording(s): CD 7 Track 15

Education, preference, experience

Qualifications: M.Mus (1st class hons); LTCL

Preferences (experience) –

Music Activities:

Play
 Sing
 Write/arrange music
 Improvise music
 Listen to music
 Read books on music

Preferences (experience) -

Musical styles:

Western classical music – pre 20thC
 Western classical music – 20thC
 Some pop/rock
 Jazz
 Some musicals
 Some minimal music
 Music of other cultures

Years of teaching experience: 2 years teaching 11-12 year olds, and 13-17 year olds.

Years of teaching in this school and ages taught: 2

Years of experience teaching the age group of the study: 2

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.

Teaching environment

School -

School situation: Auckland, New Zealand

Public or private: 12 year olds - public intermediate school;

How long has the school been open: approx. 20 years;

Level: Form 2 (intermediate);

Number of students: 600;

Socio-economic background of parents: schools 1. generally high socio-economic group;

School's interest in music:

All classes have half hour class music lessons – I go to the school 1 day a week as composer-in-schools. Orchestra, choir, some chamber music, composition, instrumental tuition;

Venue for music lessons:

Drama room;

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:

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:

11-12 years;

Gender of class: male/female –

3 boys, 8 girls;

Class level:

Form 2 - intermediate;

Class mix:

all chose to join the group – mixed ability;

Music background of the class:

very mixed, some learn instruments, others have no training;

<p>Number of music lessons for project class per week: one;</p> <p>Length of lesson: forty minutes;</p>
<p>Personal beliefs in, and teaching perspectives of, music education</p> <p>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.</p> <p>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.</p> <p>Teaching method: Primary: 1. soundscapes, graphic scores, collages, found objects; 2. vocal pieces, spoken, chanted, sung; 3. group/individually composed pieces arranged for class performance. Generated by a particular scale, rhythm, mode, harmonic sequence; 4. improvisation, often using ostinati; 5. arrangements.</p> <p>Pitch terminology and systems: letter names, not sol- fa. Use of scales/modes;</p> <p>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 /</p> <p>Rhythmic terminology and systems: counting not French time-names, English rhythm value names;</p> <p>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).</p> <p>Preliminary opinion of The Pulse Music Album project material: The project material will fit into the curriculum.</p>
<p>Approach and strategies adopted to introduce material from <i>The Pulse Music Album</i></p> <p>Project name: Canon - <i>Facets of Light</i> – with 12 year old student age group.</p> <p>Number of lessons: one 40 minute lesson – March 1990</p> <p>Familiarity of material: Use of canon comes up quite often, either by design or accident.</p> <p>Objectives: to use a melody in canon to illustrate facets of light in a revolving crystal held up to the sun. The objectives were achieved – use of specific technique i.e. canon, to achieve a definite 'mood' with the help of backing instruments i.e. autoharp, percussion.</p> <p>Technology – recordings of minimalist music: None used.</p>

Composing activities –

Sound and symbol: The children work from sound to symbol always at this level, except for rhythms, which are often symbol to sound. No notation was used in this particular piece as it was so short.

Discussion of structure/form: This was discussed. Use of canon, and ‘modulating’ melody.

Compositions - original: written by the children

Compositions - time taken to write: 40 minutes (no score made, sorry)

Student Input: Entirely the children’s work, after 10 minutes of discussion of techniques they would use them.

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: *Facets of Light*.

Performance -

Performing from notation, by ear, by memory: By ear and from memory. No notation.

Conducting: None. Very short and simple.

Pulse: No separate pulse.

Response to the minimalist project – students: The children enjoyed working on this project, especially as they actually had the crystal there and could watch the lights before writing the piece.

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

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

How the project(s) fitted into the music programme: I was able to incorporate them into the music programme but unfortunately lack of time precluded more detailed use of the projects, due to musicals, concerts etc.

Music lessons planned in advance or immediate: Lessons planned one week to the next.

Minimalist projects outside the classroom: All of the pieces we make up are included in “composition” concerts.

Total time spent on projects: One lesson per project, although this was too rushed. Each project could easily be extended to a term’s work, depending on circumstances.

Ability to strike a balance between various music activities and concepts: Excellent for rhythmic work, group performance, pitch. Harmony is more implied than worked with. I would not use these projects all the time as they don’t allow for creativity of development of musical thought of ‘ideas’ - i.e. it is a “system” of composition. However, it also encourages sensitive listening, both to you part and others, particularly good for children who tend to play too loudly.

Role of the cassette player: It is good to be able to play a class examples, not only of professional composers but other children’s work. It is also good to record and play back performances, as long as the children are prepared for not-so-good quality, and the

difference between 'live' and 'recorded' events is fully discussed. Also this type of music often requires a great deal of concentration to play and the total effect can't be appreciated until it's played back. Perhaps this is why the music doesn't have the same instant appeal as some other techniques for group performance, i.e. ostinato improvisation, jazz, chord sequences. However just as rewarding in the long run.

Student reaction to minimalist excerpts on the kit's cassette tape: I found it is the type of music the students (at least at first hearing) either really liked or hated. Some found it monotonous.

The album of projects -

The projects as a sequential programme: The projects wouldn't really work as a sequential programme. I would use them individually according to the needs of a certain class, as they all move at different speeds and in different directions, which I like to be able to follow up. I would incorporate the material in the kit into a programme which used many other methods of composition. The way they are presented at the moment is good.

Age group suited to the projects: Younger students (10 to 12 years) Canon, Phase Shifting, Music Weaving. Separate pulse lines are good. Good for use with a group of say 4 per "line" so that they don't get lost. Good for sensitive listening. Older students (14 – 15) all of them.

I feel that a lot of it is too complicated to be used for young children (i.e. 6 to 12 year olds). Obviously you have to use and adapt the material to the level of the kids, but I feel that it's more important at that age to have free expression, rather than a lot of counting and concentration, unless the performance is played back for them to listen to.

One music teacher commented that the phase shifting etc. would work better with her general classes than with the so-called "music extension" classes, because these kids find it a little boring compared with other work we have been doing with melody/harmony/rhythms/ poems in a "freer" format.

Strengths and weaknesses of the projects: I like the use of different time signatures at the same time so that strong beats are not in the same place. We have done this already using body movement i.e. different movements and sounds on different beats of the bar, first all together then in canon.

Future use of project material: I would definitely use them again in future teaching.

Teacher's response to minimalist project material: I regret I couldn't go into sufficient detail with the projects. I enjoyed working with them though.

Students' response to minimalist project material: Very varied response. Some found the music monotonous, others like it very much. 5th formers (12 year age group) like playing "Picket fences". All enjoyed African Rhythms.

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

116.1 *Facets of Light*

Facets of Light

The musical score for "Facets of Light" is presented in three systems. The first system includes four staves: Electric keyboard and metallophones (treble clef), Glockenspiel (treble clef), Cello/Electric keyboard (bass clef), and Autoharp (bass clef). The second system continues the notation for the first two staves. The third system continues the notation for the last two staves. Dynamics include *p* (piano) and *mf* (mezzo-forte). The score is in 4/4 time and features a melodic line in the upper staves and a harmonic accompaniment in the lower staves.

1.	composed by students	6.	crotchet = c.111
2.	performed with metallophones, electric keyboards, autoharp and cello (?)	7.	score transcribed by researcher
3.	performed in a concert	8.	one complete take – evocative performance
4.	expansion of structure, time, instrumentation and dynamics	9.	CD for Appendix 7 Track 15
5.	playing time 41 secs		

Table 7.1 Commonalities and differences between the four expanders

Education, preferences and experience:
<ul style="list-style-type: none"> • all were musically qualified; • all but one were experienced teachers; • three were specialist music teachers, one a composer-in-schools; • all listed eclectic music preferences; • all noted a preference for twentieth century art music; • three noted composition as a personal activity; • all had previously introduced students to twentieth century art music composers although not necessarily through composing activities; • all had previously introduced students to music of non-Western cultures, three of which were countries with a keyed percussion (gamelan) ensemble.
Teaching environment:
<ul style="list-style-type: none"> • all worked in schools whose student population drew largely from medium to high socio-economic group; • three taught at secondary level, one at intermediate (New Zealand) level; • all taught in public schools; • all worked in schools with a strong interest in music; • three worked with students who had not elected to study music, one worked with students who had; • three worked with non-elective classes, two of whom overall were musically experienced; • three felt they had sufficient resources, one felt resources were poor.
Teaching perspective:
<ul style="list-style-type: none"> • two teachers placed an emphasis on empowerment through music in their music philosophy, one adopted an 'integrated' approach, and one did not address the question; • two ranked composing and improvisation highest and two ranked singing highest.
Approaches and strategies:
<ul style="list-style-type: none"> • all predicted the project material would fit into their current music programme; • three engaged their students with the first project, Phase Shifting; • all named skills, concepts learning and revision as one of their objectives; • all drew on common ground either acknowledged or unacknowledged; • three teachers engaged the students in a strategy sequence which included performing one of the project compositions as model, discussion, composition based on a model and performance; • three played prerecorded minimalist excerpts; • three contextualised composing activities by making them relevant to contemporary society;

- all teachers adopted a prescriptive task design – model, with two adopting a multi-model task design;
- three discussed aspects of structure with the students;
- three spent one to four lessons with the project material while one took an ‘eternity’;
- the students of three teachers took one to two periods to compose;
- all encouraged students to compose as individuals, in groups and as a class;
- one recycled material;
- two encouraged students to adopt titles for their compositions;
- all teachers noted that the students worked from sound to symbol;
- three improvised;
- all teachers offered keyed percussion i.e. metallophones for student performance and composition;
- two teachers built a pulse into the compositions;
- all noted that students played from memory combined with ear or notation;
- three teachers submitted recordings of accurate performances of all compositions submitted to the study;
- three used recording student performances for evaluative purposes;
- two selected and adapted project material to the students’ different levels and the students’ reasoning was sought within these tasks;
- all adopted a student-centred approach;
- I interpreted the roles adopted by all the teachers to be enablers who allowed and encouraged the students to explore as they composed;
- one teacher was a composer;
- one teacher adopted the role of teacher as student.

Outcomes:

- all teachers submitted compositions which expanded various musical parameters presented in the project models, six of the seven compositions expanding aspects of structure;
- three submitted compositions which developed various musical parameters presented in the project models;
- two teachers empowered the students through a concert, the enthusiasm of the teacher, student humour, being a professional composer;
- all listed some criticisms about *The Pulse Music Album*;
- all teachers were positive about their engagement with the projects;
- the students of three of the teachers were positive about some of the project material;
- all teachers expressed interest in using the material in the future.

Table 7.2 Commonalities and differences between the two developers

Education, preferences and experience:
<ul style="list-style-type: none"> • both were musically qualified; • both were experienced teachers; • both were specialist music teachers; • one developer listed eclectic music preferences and one listed narrow preferences; • both noted a preference for twentieth century art music; • both noted composing and arranging as personal activities; • both had previously introduced students to twentieth century art music through concepts; • both had previously included music of non-Western cultures in their teaching.
Teaching environment:
<ul style="list-style-type: none"> • both worked in schools whose student population drew largely from middle to low socio-economic group; • one taught at primary level, one at secondary; • one worked in a private school, one in a public; • both worked in schools where music was supported to some extent; • both worked with students who had not elected to study music; • both worked with students of mixed musical ability; • both worked in schools which they considered well-resourced.
Teaching perspective:
<ul style="list-style-type: none"> • one teacher focused a music philosophy around practical considerations and one did not address the question; • both ranked performance, singing and movement above composition.
Approaches and strategies:
<ul style="list-style-type: none"> • both predicted the project material would fit into their current music programme; • both engaged their students, first, with the Phase Shifting project; • both listed aims of improvisation and performance skills rather than a focus on composition; • both acknowledged common ground with previous work; • both engaged their students in a strategy sequence of performing a composition from the project as a model, using a model for composing activities, and playing the compositions; • neither noted that they had played excerpts of prerecorded minimal music; • neither contextualised the project material; • both employed the student composers as individuals, not in groups; • both adopted a prescriptive task design - model; • neither noted that they had discussed any aspect of structure with the students;

- one teacher tried the material before engaging students with it in the classroom;
- one teacher spent a long time with the material (c.eleven lessons) and one a short time (two-three lessons);
- both noted that the students took around two days to compose;
- both encouraged students to compose as individuals;
- one submitted student compositions with titles (those with pitch only) and one did not;
- one noted that the students composed from sound to symbol and the other vice versa;
- one teacher improvised;
- both offered the students xylophones on which to compose and play;
- both noted that students played from notation with one teacher mentioning use of memory as well;
- both submitted only two recordings of performances of student works;
- one noted the value of recording student compositions;
- both were student-centred;
- both adopted the role of instructor;
- one adopted the role of teacher as composer.

Outcomes:

- both submitted compositions which developed several musical parameters;
- one teacher was critical and one positive about *The Pulse Music Album* contents;
- both teachers were positive about their engagement with some aspects of the project material but expressed concern about details of their approaches;
- both teachers noted that their students gave mixed responses to the project(s);
- one expressed interest in using the material in the future.