THE SECONDARY SCHOOL MUSIC CURRICULUM: AN INVESTIGATION OF DESIGNED LEARNING EXPERIENCES THAT PROMOTE MUSICAL UNDERSTANDING

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B.Mus. (Hons. Perf.), Dip.Ed., M.Ed.

A research portfolio submitted in fulfilment of the
requirements for the degree of
Doctor of Education

School of Education
Faculty of Professions
University of Adelaide
May, 2013

Appendices

Appendix 1: DECS Research Permission

Department of Education and Children's Services

Office of People and Culture

Government of South Australia

Education Centre
31 Flinders Street
Adelaide 5000
South Australia
GPO Box 1152
Adelaide 5001
Tel. 8226 1012
Fax 8226 8360

DECS CS/04/2934.9

22 April 2005

Dear Principal/Director/Site Manager

The research project *'Perspectives on Music Ensemble Competitions'* being conducted by *Mr Antony Hubmayer* from the University of Adelaide has been reviewed centrally and approval granted for access to DECS sites. However, the researcher will still need your agreement to proceed with this research at your site.

Once approval has been given at the local level, it is important to ensure that the researchers fulfil their responsibilities in obtaining informed consent as agreed, that individuals' confidentiality is preserved, and that safety precautions are in place.

Researchers are encouraged to provide feedback to sites used in their research, and you may want to make this one of the conditions for accessing your site. To ensure maximum benefits to DECS, researchers are also asked to supply the department with a copy of their final report, which will be circulated to interested staff and then made available to DECS educators for future reference.

Please contact me on (08) 8266 0943 for further clarification if required, or to obtain a copy of the final report.

Yours sincerely

Lexie Mincham
MANAGER, NETWORKED LEARNING COMMUNITY

Appendix 2: Parent Research Information

Student Perspectives on Music Ensemble Competition
Research Information Sheet

29/03/2006

Dear Parent/Care Giver,

I am a post graduate student currently undertaking studies for the degree of Doctor of Education at the Graduate School of Education, University of Adelaide. I am conducting research regarding student perspectives on music ensemble competition in High Schools and Colleges in South Australia.

The research project involves students completing three questionnaires that are directed towards identifying student's perspectives on ensemble competitions.

- The first questionnaire establishes background attitudes and is pre-competition.
- The second questionnaire establishes attitudes post competition (soon afterwards).
- The third and final questionnaire establishes the longer term perspective of this experience (towards the conclusion of the ensemble year).

Questionnaires will contain about 15 questions and will take approximately 10 minutes to complete. It is proposed that students complete each questionnaire at the conclusion of a scheduled rehearsal. I will supervise the distribution and completion of the questionnaires during this session. An example of the style of questions is:

Do you believe that playing in a competition has been an immediate benefit to your ensemble?
Unsure ❑ Yes ❑ No ❑

Why? _____

Student and school identities will remain confidential and will not be published. Student names written on the questionnaires are for my own organisational purposes and will not be published or discussed in any public forum. The original questionnaire documents will be stored for an appropriate period until verification is no longer required. The documents will then be destroyed by a paper shredder. Students may withdraw from the research project at any time without prejudice.

This research has been approved by the University of Adelaide Ethics Committee and the Department of Education and Children's Services. The Principal of your child's school and Ensemble Director have also seen and read the questionnaires and are satisfied with their content.

If you are prepared for your child to take part, a Consent Form is attached for you to sign. Should you require additional information regarding this research, please contact;

Researcher - Antony Hubmayer,
C/O Scotch College Adelaide, Carruth Road, Torrens Park 5062
phone: (08) 82744328 fax: (08) 82744344 mobile: 0402 827496
email: ahubmayer@scotch.sa.edu.au

Thank you for considering this request.

Antony Hubmayer
M. Ed (Studies)., B. Mus. (Perf. Hons.)., Dip. Ed.

Appendix 3: Research Consent Form

Student Perspectives on Music Ensemble Competition

RESEARCH CONSENT FORM

I (Parent/Care Giver name) _____
hereby consent to my child's involvement in the research project entitled:

Student Perspectives on Music Ensemble Competition.

I have read and understood the Research Information Sheet on the above project and understand that my child is being asked to complete three questionnaires during the 2005 school year.

I understand that my child may not directly benefit by taking part in this research.

I understand that while information gained in the study may be published, my child will not be identified and all individual information will remain confidential.

I understand that I can withdraw my child from the study at any stage up until the end of the collection of data.

I understand that there will be no payment for my child taking part in this study.

I am aware that I should retain a copy of the Research Information Sheet and Consent Form for future reference.

I consent to my child being involved in this project.

Signed: _____ Date_____

Relationship to child: _____

Name of child: _____

Please return this sheet to your school for collection as soon as possible.

Researcher - Antony Hubmayer, C/O Scotch College Adelaide, Carruth Road, Torrens Park 5062
phone: (08) 82744328 fax: (08) 82744344 mobile: 0402 827496 email: ahubmayer@scotch.sa.edu.au

Appendix 4: Teacher Learning Design Questionnaire

Teacher Learning Design Questionnaire: Student Perspectives on Ensemble Competition

The purpose of this questionnaire is to provide insight into the learning design process of the teacher. It aims to identify: conducting and teaching experience, views on ensemble competitions, planning for the ensemble year and how ensemble success is measured.

Questionnaire Instructions

Tick, cross or mark **only one** of these boxes.

Yes ❑ No ❑ ***OR*** Disagree ❑ - Agree ❑ - Unsure ❑

If you wish to expand your answer please do so on this form or attach an additional sheet.

Leave a question blank if you are uncomfortable answering or you are unclear as to the meaning of the question.

Name _____ School _____

1. ***Gender:*** Female ❑ Male ☑

2. ***Approximate Age:*** 22- 30 ❑ 30-40 ❑ 40-50 ☑ 50 + ❑

3. ***What is the title of your research ensemble*** Concert Band

4. ***Indicate how many years you have been a classroom teacher?***

   None ❑ 1-4 ❑ 5-9 ❑ 10-14 ❑ 15+ ☑

5. ***Indicate how many years have you conducted the following type of ensembles?***

Choirs	0 ❑	1 ❑	2 ❑	3 ❑	4 ☑	5 ❑	6 ❑	7 ❑	8 ❑	9 ❑	10+ ❑
Concert Band	0 ❑	1 ❑	2 ❑	3 ❑	4 ❑	5 ❑	6 ❑	7 ❑	8 ❑	9 ❑	10+ ☑
Stage Band	0 ❑	1 ❑	2 ❑	3 ❑	4 ❑	5 ❑	6 ❑	7 ❑	8 ❑	9 ❑	10+ ☑
Orchestra	0 ☑	1 ❑	2 ❑	3 ❑	4 ❑	5 ❑	6 ❑	7 ❑	8 ❑	9 ❑	10+ ❑
Other	0 ❑	1 ❑	2 ❑	3 ❑	4 ❑	5 ❑	6 ❑	7 ❑	8 ❑	9 ❑	10+ ❑

   If you selected 'Other', please specify how you would categorize the ensemble

   _____

6. ***How many regular weekly rehearsals do you schedule for this research ensemble?***
   1 ☑ 2 ❑ 3 ❑ comment: more around competitions

7. ***Indicate the average duration of rehearsals?***
   30 minutes ❑ 45 minutes ❑ 60 minutes ☑ 90 minutes ❑

8. ***List reasons why you have your ensemble participate in music ensemble competitions.***

   Provides a focus that ~~het~~ motivates students to attend practises & improve. Gives a measurable outcome for your efforts & you get to hear other student groups & their repertoire.

9. ***How many times have you performed in a choral or ensemble competition?***
   0 ❑ 1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 ❑ 6 ❑ 7 ❑ 8 ❑ 9 ❑ 10+ ☑

10. ***List what you think students should learn from being in this ensemble activity.***

Students should learn music skills like blending, expression, articulation, rhythm & general control things, but also the enjoyment of ~~ensemble~~ group music ~~pt~~making and bonding together / teamwork etc.

11. ***List examples of how you design experiences for this learning to occur.***

Regular rehearsals, annual tour, performances once a term, competition performances, filming performances and playing it back to students.

12. ***What would indicate that you and your ensemble have had a successful year?***

We played our music well and the students and parents were still happy and enthusiastic.

13. ***What best describes your attitude towards music ensemble competition?***

	Disagree	Agree	Unsure
Compete to win prizes	☑	☐	☐
Do our best and enjoy the experience	☐	☑	☐
Don't think we'll win any prizes	☐	☐	☑
It motivates students to attend rehearsals	☐	☑	☐
My schools making me do it	☑	☐	☐
Prefer we weren't competing	☑	☐	☐
Competitions are important to music programs	☐	☑	☐
Improves ensemble musicianship	☐	☑	☐
Competitions are not essential to music programs	☐	☑	☐

14. ***Do you believe students regard competitive public performances as more motivational than non-competitive performances?***

No ☐ Unsure ☐ Yes ☑

Why? Depends on my emphasis. Easier to motivate students to put time/energy into practise & preperation with talk of a competition judging than a general concert.

Thank you for completing the Teacher Learning Design Questionnaire for 'Student Perspectives on Ensemble Competition'

Please return to: Antony Hubmayer
C/O Scotch College Adelaide, Carruth Rd., Torrens Park S.A.5062
phone: (08) 8274 4328 fax: (08) 8274 4344 mobile: 0402 827496
email: ahubmayer@scotch.sa.edu.au

Appendix 5: Student Questionnaire 1

Questionnaire 1 Student Perspectives on Ensemble Competition

The purpose of this questionnaire is to provide data that establishes: background information, attitudes towards competition, personal aspirations.
The term 'Ensemble' refers to a music performing group such as a Band, Orchestra or Choir.
Questionnaire Instructions
Tick, cross or mark **only one** of these boxes.
Yes ❑ No ❑ ***OR*** Disagree ❑ - Agree ❑ - Unsure ❑
If you wish to expand your answer please do so on this form or attach an additional sheet.
Leave a question blank if you are uncomfortable answering or you are unclear as to the meaning of the question.

Name _____ School _____

1. ***Current Age:*** 12 ❑ 13 ❑ 14 ❑ 15 ❑ 16 ❑ 17 ☑ 18 ❑ Older ❑

2. ***Gender:*** Female ☑ Male ❑

3. ***How many years have you played your ensemble instrument or sung with choirs?***
1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 ☑ (choir) 6 ❑ 7 ❑ 8 ❑ 9 ☑ (flute) 10+ ❑

4. ***Indicate how many other instruments you believe you play competently (voice is also an instrument)***
0 ❑ 1 ❑ 2 ❑ 3 ❑ 4 ☑ 5 +❑
ie 4 in total (flute, piccolo, voice, sax)

5. ***Indicate how many hours of personal practice you would do on your instrument (s) each week.***
0 ❑ 2 ❑ 4 ❑ 6 ❑ 8 ☑ 10 ❑ 12 ❑ 14 ❑ 16 ❑ 18 ❑ 20+ ❑ *(on average)*

6. ***How many years playing with this ensemble or an equivalent ensemble?***
0 ❑ 1 ❑ 2 ❑ 3 ❑ 4 ❑ 5+ ☑

7. ***How many times have you performed in a choral or ensemble competition?***
0 ❑ 1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 ❑ 6 ❑ 7 ❑ 8 ❑ 9 ❑ 10+ ☑

8. ***Have you completed any instrumental or vocal performance examinations?***
Yes ☑ No ❑
If Yes, on what instruments and what was the highest examination level attained? (i.e. grade 5 flute)
Grade 8 Flute

9. ***How would you describe your ensembles preparation for the competition?***
Excellent ❑ Thorough ☑ Adequate ❑ Not very good ❑ Very Poor ❑

10. ***What do you believe best describes your ensembles aspirations for this competition?***

	Disagree	Agree	Unsure
a) Competing to win prizes	❑	☑	❑
b) Do our best and enjoy the experience	❑	☑	❑
c) Don't think we'll win any prizes	☑	❑	❑
d) Conductors making us do it	☑	❑	❑
e) Prefer we weren't competing	☑	❑	❑

11. ***Indicate how strongly you agree with the following statements?***

Being in an ensemble competition motivates me to:

	Disagree	Agree	Unsure	
a) Practice my instrument more	☐	☑	☐	
b) Listen more attentively to music	☐	☑	☐	
c) Write my own music	☑	☐	☐	
d) Turn up for rehearsals	☑	☐	☐	- I would turn up anyway don't need this motivation
e) Enjoy music playing more	☐	☑	☐	- get a higher level of excellence it is more enjoyable
f) Treat music making more seriously	☐	☑	☐	
g) Enjoy listening to music more	☑	☐	☐	
h) Try to improve my playing	☐	☑	☐	
i) Feel good about myself	☐	☑	☐	
j) Win at all costs	☑	☐	☐	
k) Want to be part of a team	☐	☑	☐	

12. ***List what musical criteria you think an adjudicator (judge) will be listening for.***

- choral competition - clear entries and cutoffs (together)
- intonation
- musicality (ie 'feeling' the music - having a connection to the music & portraying our emotions)
- dynamic variation
- blending within sections + balance between them
- appropriate phrasing (breathing)
- good diction
- etc.

13. ***What position do you think your ensemble will be awarded if there are 4 ensembles competing against you?***

Cannot answer 1st ☑ - 2nd ☑ - 3rd ☐ - 4th ☐ - 5th ☐

↑ depends which ensembles we are competing against and which division

14. ***What would indicate that you and your ensemble have had a successful year?***

If I get that feeling when we are singing in a performance (generally in a competition as this is when the choir generally has the most intensity + concentration. The feeling is of absolute excitement that you can feel through your whole body: when you can't stop smiling and you feel satisfied with and ~~prod~~proud of the music you have created. That feeling is my indication for success + self satisfaction in all music but especially choral work

15. ***List the things you think you should be learning from being in this ensemble.***

- I think singing with articulation, dynamics, expression, blending our sound, diction, and general ensemble team stuff. like getting along together

Even if we win a competition if I don't get the feeling. I don't believe we have been successful

16. ***List any other performances your ensemble is scheduled to present this year.***

- Lots
- Adelaide Eisteddfods
- sh school performances etc.

Thank you for completing the first Questionnaire.

Antony Hubmayer
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Appendix 6: Student Questionnaire 2

Questionnaire2 Student Perspectives on Ensemble Competition

The purpose of this questionnaire is to provide data that establishes a short term personal perspective regarding the result of the ensemble competition.
Questionnaire Instructions
Tick, cross or mark **only one** of these boxes.
Yes ☐ No ☐ ***OR*** Disagree ☐ - Agree ☐ - Unsure ☐
If you wish to expand your answer please do so on this form or attach an additional sheet.
Leave a question blank if you are uncomfortable answering or you are unclear as to the meaning of the question.

Name _____ School _____

1. ***How satisfied were you with your ensembles performance in the competition?*** Choosing the open division
   disappointed ☐ unsure ☐ satisfied ☐ very satisfied ☑

2. ***How satisfied were you with your own performance during the ensemble competition?***
   disappointed ☐ unsure ☐ satisfied ☐ very satisfied ☑

3. ***Do you believe that playing in a competition has been an immediate benefit to your ensemble?***
   Unsure ☐ Yes ☑ No ☐

   Why? Because it made us focus on the musical detail which helps motivate the concentration levels

4. ***Do you believe having played in a competition will be of any long term benefit to your ensemble?***
   Yes ☐ No ☐ Unsure ☑

   Why? Yes - we sang exceptionally ~~well~~ under pressure (know we can do well)
   No - confusing as to what is considered a good quality choir

5. ***Has performing in this competition made you more enthusiastic about performing in other competitions?***
   No ☑ Unsure ☐ Yes ☑
   Both yes because we want to beat our opposition, no because we sang really well yet the adjudicates were neither consistant nor logical (worries me)

   Why? ~~Yes - we sang exceptionally under pressure (know we can do well)~~ -
   ~~No - confusing as to what is considered a 'good quality choir'~~

6. ***How many divisions or sections did your ensemble compete in?***
   1 ☐ - 2 ☐ - 3 + ☐
   How many other ensembles competed in your division or section?
   1 ☐ - 2 ☐ - 3 ☐ - 4 ☐ - 5 ☑ - 6+ ☐

7. ***Indicate the ranking positions your ensemble was awarded?***
   1st ☐ - 2nd ☐ - 3rd ☑ - 4th ☐ - 5th ☐ Lower ☐
   Please list any other awards or commendations your ensemble received.

   see results list.

8. ***Do you believe your ensembles preparation justified the position they were awarded?***
   Unsure ☐ Yes ☐ No ☑

   Why? should have gotten higher ranking deserved because of preparations + performance

9. ***List what musical criteria you think the adjudicator (judge) was listening for.***

energy the 'wow' factor, impressive rather than challenging pieces, non-musicality
-confused me because she said her criteria, which we matched + the winner didn't, in our opinion (and audience members)

10. ***How did you feel when you read or heard the adjudicator's comments?***
disappointed ☑ unsure ☐ satisfied ☐ very satisfied ☐
surprised ☑

11. ***What position do you think your ensemble should have been awarded?***

1st ☑ - 2nd ☐ - 3rd ☐ - 4th ☐ - 5th ☐ lower ☐

12. ***Indicate how many hours of personal practice you would do on your instrument (s) each week.***
0 ☐ 2 ☐ 4 ☐ 6 ☑ 8 ☐ 10 ☐ 12 ☐ 14 ☐ 16 ☐ 18 ☐ 20+ ☐ *(on average)*

13. ***Since the competition, what best describes your ensemble?***

	Disagree	Agree	Same or Neutral
a) Not interested in competitions	☑	☐	☐
b) Want to keep improving	☐	☑	☐
c) Our rehearsals are worse	☑	☐	☑ - haven't rehearsed yet
d) Dislike rehearsing	☐	☑	☑ - ~~rehearsing~~
e) Tired of the same songs/tunes	☐	☑ a bit	☑
f) We play music better	☐	☐	☑ - " "

14. ***Indicate how strongly you agree with the following statements?***
Since the ensemble competition, I am motivated to:

	Disagree	Agree	Same or Neutral
a) Practice my instrument more	☑	☐	☐
b) Listen more attentively to music	☐	☑	☐
c) Write my own music	☑	☐	☐
d) Turn up for rehearsals	☐	☑	☐
e) Enjoy music playing more	☐	☐	☑ - already did
f) Treat music making more seriously	☐	☐	☑ - " "
g) Enjoy listening to music more	☐	☐	☑ - " "
h) Try to improve my playing	☐	☑	☐
i) Feel good about myself	☐	☑	☐ - we sang brilliantly
j) Win at all costs	☑	☐	☐
k) Want to be part of a team	☐	☑	☐ - already did

15. ***What would indicate that you and your ensemble have had a successful year?***
Keep singing well, enjoy being together at rehearsals

16. ***List the things you think you should be learning from being in this ensemble.***
Attention to musical detail like tone, dynamics/expression, blending voices, rythm - probably humility/resilience

17. ***List any other performances your ensemble is scheduled to present this year.***
Annual concert, christmas things, school stuff

Thank you for completing the second questionnaire.

Researcher - Antony Hubmayer, C/O Scotch College Adelaide, Carruth Rd., Torrens Park S.A.5062
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Appendix 7: Student Questionnaire 3

Questionnaire 3 Student Perspectives on Ensemble Competition

The purpose of this questionnaire is to provide data that establishes a longer term perspective of participating in ensemble competition.

Questionnaire Instructions

Tick, cross or mark **only one** of these boxes.

Yes ❑ No ❑ ***OR*** Disagree ❑ - Agree ❑ - Unsure ❑

If you wish to expand your answer please do so on this form or attach an additional sheet.

Leave a question blank if you are uncomfortable answering or you are unclear as to the meaning of the question.

Name _____ School _____

1. ***How satisfied were you with your ensembles performance throughout the year?***
   disappointed ❑ unsure ❑ satisfied ❑ very satisfied ☑

2. ***How satisfied were you with your own performance throughout the year?***
   disappointed ❑ unsure ❑ satisfied ❑ very satisfied ☑

3. ***With this ensemble and any other, how many non-competitive public performances have you been involved in during 2006?***
   0 ❑ 2 ❑ 4 ☑ 6 ❑ 8 ❑ 10 ❑ 12 ❑ 14 ☑ 16 ❑ 18 ❑ 20+ ❑

4. ***With this ensemble and any other, how many competitive public performances have you been involved in during 2006? (Each division counts as another performance)***
   0 ❑ 2 ❑ 4 ☑ 6 ❑ 8 ❑ 10 ❑ 12 ❑ 14 ❑ 16 ❑ 18 ❑ 20+ ❑

5. ***Do you believe your ensemble would have reached it's present musical level without performing in a competition?***
   Unsure ❑ Yes ❑ No ☑

   Why? Made the whole choir work harder on the finer points of the music leading up to the competition which ~~did~~ didn't seem to happen as well afterwards

6. ***What do you now consider to be the benefits of participating in ensemble competitions?***

   Provides an aim and purpose for the extra rehearsals and a measurable way of seeing how well your choir sounds compared to others

7. ***What do you now consider to be the disadvantages of participating in ensemble competitions?***

   The pressure of doing your best and the disappointment when you think you have done well and the adjudicator finds faults. Also limits social time at school with extra rehearsals to cover the songs

8. ***Would you recommend other students to participate in ensemble competitions?***
   Unsure ❑ No ❑ Yes ☑

   Why? Produces better focus for groups and better performance levels

9. ***Do public performances that are non competitive motivate you as compared to performing in competitions?***

Yes ☐ Unsure ☐ No ☑

Why? Gives me a bit more push to do well but I want our singing to be good all the time and both are important

10. How would you explain the influence the adjudicator's comments had on your ensemble?

No influence ☐ Lasting negative ☐ Short negative ☑ Short positive ☐ Lasting positive ☐

Why? I think for a few of us it seemed confusing against the criteria - most students didn't care

11. Indicate how many hours of personal practice you would now do on your instrument (s) each week.

0 ☐ 2 ☐ 4 ☑ 6 ☐ 8 ☐ 10 ☐ 12 ☐ 14 ☐ 16 ☐ 18 ☐ 20+ ☐ *(on average)*

12. At the conclusion of your ensemble year, what best describes your ensemble?

	Disagree	Agree	Same or Neutral
a) Not interested in competitions	☑	☐	☐
b) Want to keep improving	☐	☑	☐
c) Our rehearsals are worse	☐	☐	☑
d) Dislike rehearsing	☐	☐	☑
e) Tired of the same songs/tunes	☐	☑	☐
f) We play music better	☐	☐	☑

13. Indicate how strongly you agree with the following statements?

Since the ensemble competition, I am motivated to:

	Disagree	Agree	Same or Neutral
a) Practice my instrument more	☑	☐	☐
b) Listen more attentively to music	☐	☑	☐
c) Write my own music	☑	☐	☐
d) Turn up for rehearsals	☐	☑	☐
e) Enjoy music playing more	☐	☐	☑ - already did
f) Treat music making more seriously	☐	☐	☑ - " "
g) Enjoy listening to music more	☐	☐	☑ - " "
h) Try to improve my playing	☐	☑	☑ - " "
i) Feel good about myself	☐	☑	☐
j) Win at all costs	☑	☐	☐
k) Want to be part of a team	☐	☑	☐

14. List the things you think you have learnt from being in this ensemble.

Singing music from different countries and musical styles. Better understanding of technical choral stuff like tone, blend etc.

15. List three highlights or best memories from performing in your ensemble in 2006.

Our tour and performances in the competition, as well as our annual music concert

Thank you for completing the final questionnaire.

Researcher - Antony Hubmayer, C/O Scotch College Adelaide, Carruth Rd., Torrens Park S.A.5062
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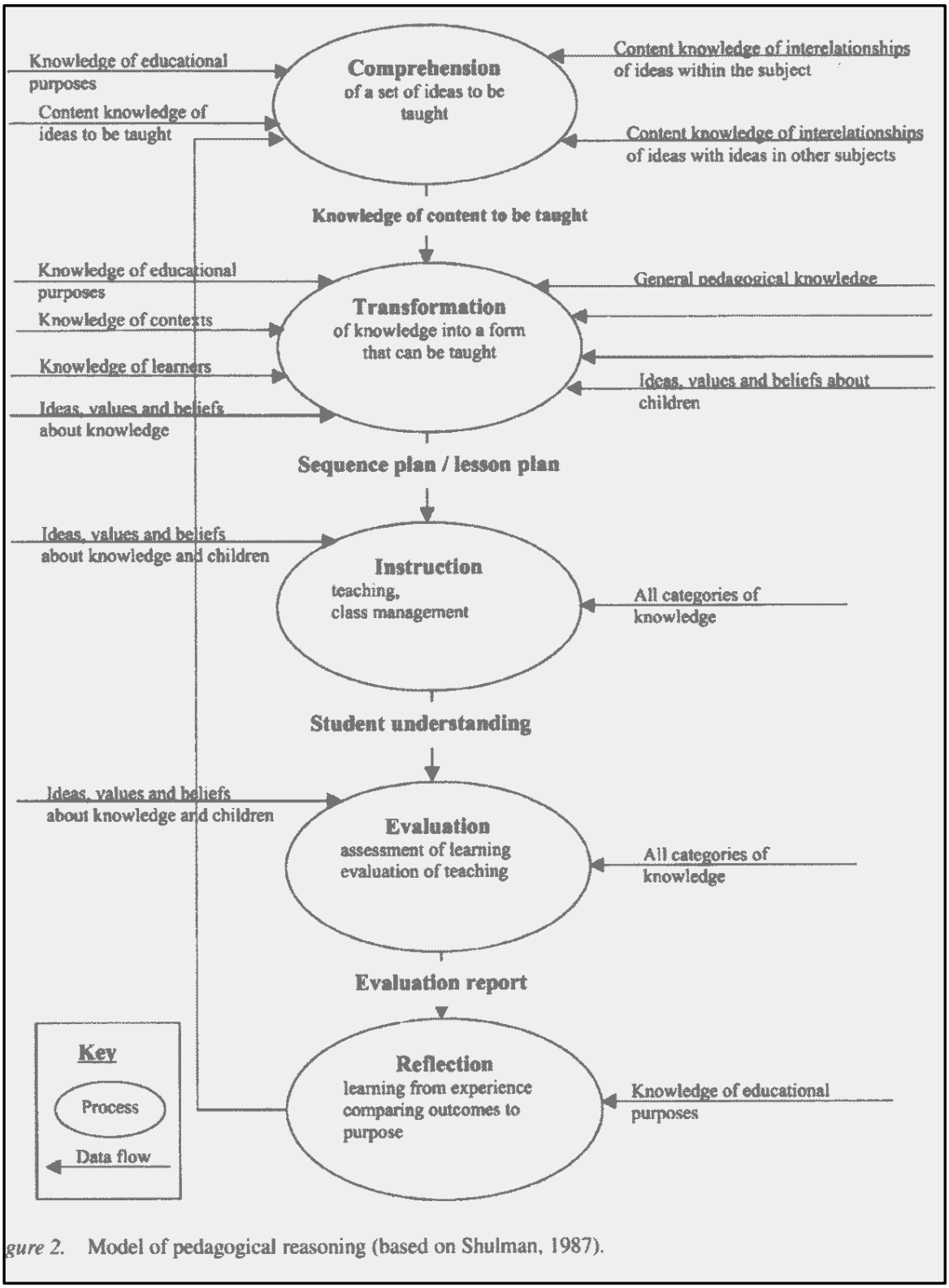
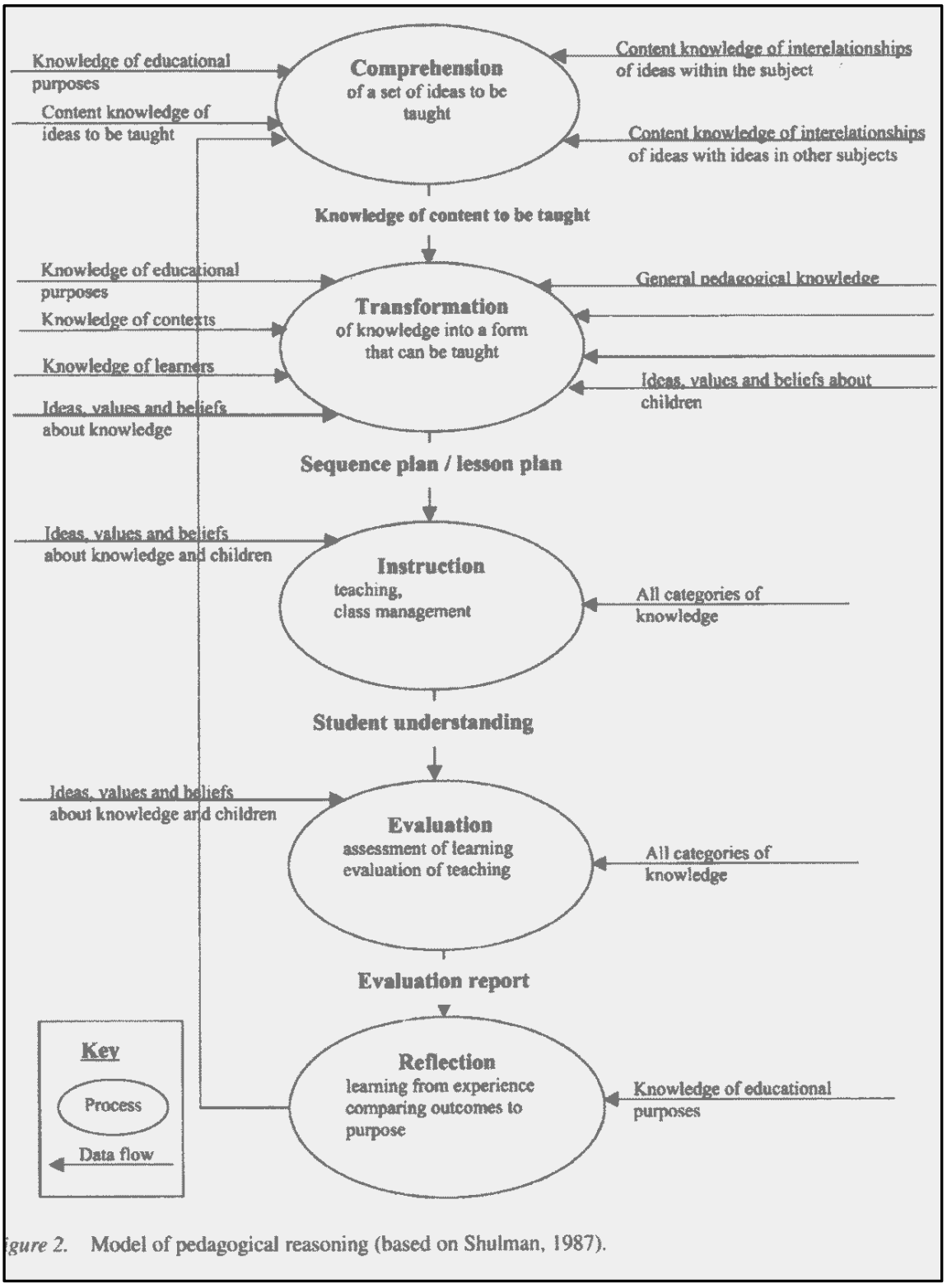
Appendix 8: Shulman and Webb Pedagogical Reasoning Model



gure 2. Model of pedagogical reasoning (based on Shulman, 1987).

Appendix 9: Transformation Stages - Shulman and Webb P. R. M.



igure 2. Model of pedagogical reasoning (based on Shulman, 1987).

Appendix 10: Music Technology Curriculum Survey

Music Technology Curriculum Survey

1/ Prioritise the following list in order of importance to your music curriculum- 1 is most important. *

- [7] Guided Instrumental Instruction – (ie.. Piano, Guitar, Bass, StarPlay)
- [5] Game Based – (ie..Music ACE, Groovy, Thinking Things, Guitar Hero, Singstar)
- [4] Internet Research – (ie.. Groves, Wikipedia, BBC, TAB, Lyrics)
- [2] Audio/MIDI Composition/Arranging – (Sonar, Garage Band, Acid Music, Cubase)
- [1] Notation Composition/Arranging - (Sibelius, Finale)
- [3] Drill and Practice / Flexible Practice (ie.. Auralia, Musition, Music Theory.Net)
- [6] Internet Collaborative Environments (Blogs, WIKIs)

2/ Indicate how important each of the following uses of Music Technology are to your music curriculum.

Drill and Practice / ~~Flexible~~ Practice (ie.. Auralia, Musition, Music Theory.Net)
Essential ---- Useful ----- Used Occasionally ----- Not Required

Internet Collaborative Environments – ~~(Blogs and~~ WIKIs)
Essential ---- Useful ----- Used Occasionally ----- Not Required

Guided Instrumental Instruction – ~~(ie.. Piano, Guitar,~~ Bass, StarPlay)
Essential ---- Useful ----- Used Occasionally ----- Not Required

Game Based – (ie..Music ACE, Groovy, Thinking Things, ~~Guitar Hero,~~ Singstar)
Essential ---- Useful ----- Used Occasionally ----- Not Required

Internet ~~Research~~ – (ie.. Groves, Wikipedia, BBC, TAB, Lyrics)
Essential ---- Useful ----- Used Occasionally ----- Not Required

Audio/~~MIDI~~ Composition/Arranging – (Sonar, Garage Band, Acid Music, Pro Tools)
Essential ---- Useful ----- Used Occasionally ----- Not Required

Notation ~~Composition~~/Arranging - (Sibelius, Finale, MuseScore)
Essential ---- Useful ----- Used Occasionally ----- Not Required

*** These categories are identified by Williams & Webster in 'Experiencing Music Technology' 2006 Thomson/Schirmer (Blog and WIKI is my own addition drawn from the Internet based category)**

3/ What percentage of your music curriculum contact time involves the use of Music Technology?

Yr 7 ☐☐☐%
Yr 8 ☐2☐0%
Yr 9 ☐2☐5%
Yr 10 ☐2☐5%
Yr 11 ☐3☐0%

4/ List the Music Technology tools you most value - (Software and Hardware)

Macbook, Sibelius, Logic, Auralia, Garage Band.

5/ Please describe your teaching approach to using Music Technology?

I like to use mini-projects when recording or composing.
Tutorial activities and worksheets to get students started.
For Sibelius I'll often get them to arrange melodies or reharmonise.
For Logic I'll use a constructivist approach and let them discover aspects of the software and recording process in a gentle, guided way.

Appendix 11: Music Technology Curriculum Survey Results

1. Prioritise the importance to music curriculum

(Sample number is 22 respondents; 7 choices; maximum frequency = 154 (22 x 7)

Guide Inst	Game Based	Internet Research	Audio/MIDI	Notations	Drill Practice	Internet Collaboration
frequency 154		max				
35	37	97	131	131	98	60

2. Indicate the importance to music curriculum (Sample number is 22 respondents)

2a Drill Practice/Flexible			
Essential	Useful	Occasional	Not Required
11	8	3	0

2b Guided Instrumental Instruction			
Essential	Useful	Occasional	Not Required
0	6	7	9

2c Game Based			
Essential	Useful	Occasional	Not Required
0	4	10	8

2d Internet Research			
Essential	Useful	Occasional	Not Required
14	7	1	0

2e Audio/MIDI Composition/Arranging			
Essential	Useful	Occasional	Not Required
19	3	0	0

2f Notation Composition/Arranging			
Essential	Useful	Occasional	Not Required
20	2	0	0

2g Internet Collaborative Environments			
Essential	Useful	Occasional	Not Required
2	10	7	3

Appendix 11: Music Technology Curriculum Survey Results (p.2)

3. Year Level use of music technology in percentage (Sample number is 22 respondents)

3a Year 7					
10%	20%	30%	40%	50%	60%
2	5	1	0	0	0

3b Year 8					
10%	20%	30%	40%	50%	60%
1	14	6	1	0	0

Most Important
Use gradually increases through the year levels

Year 8 approx 23% contact time

Year 9 – approx 25%

Year 10 – approx 28%

Year 11 – approx 33%

3c Year level use of Music Technology in Percentage Year 9					
10%	20%	30%	40%	50%	60%
0	10	10	2	0	0

3d Year level use of Music Technology in Percentage Year 10					
10%	20%	30%	40%	50%	60%
1	7	13	1	0	0

3e Year level use of Music Technology in Percentage Year 11					
10%	20%	30%	40%	50%	60%
0	4	11	7	0	0

Audacity Tutorial 1

Play - Edit - Save

Audacity is an audio editing program that can record, playback and alter sounds and music.

Playing Music

DO ☛ Go to the menu **File>Open** and navigate following the teachers directions and locate and open the file **'Audacity tut5 song.mp3'.** Press play and listen.

Another way of getting sounds into Audacity is by importing audio into existing songs.

Do Not close the current song, instead;

☛ Go to **Project Menu>Import Audio>** follow the teachers directions and locate and open the file 'Once a Jolly Swagman.wav'. Press play and listen.

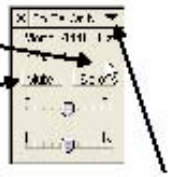
Audio editors like Audacity allow you to do much more than just play pre-recorded sounds. We will now alter the recorded sounds by adding effects processing.

☛ Go to the menu **File>Open** and select **'To Be Or Not To Be.wav',** press play and listen.

Duplicating the Track

Before we alter this original sound, we will first duplicate, mute the original track and then rename the duplicate so that we always have an unedited version of the text, just in case we do something very horrible to it!

On the track titled 'To Be Or Not To Be'



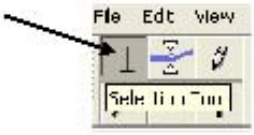
☛
- Move the mouse cursor just above the Solo Button (not on the 'Solo' text) left click and the track will turn grey.
- Go to **Edit Menu>Duplicate**
- On the top track, left click on the mute button

The duplicated track is always located at the bottom of the track list.

☛
- On the duplicated track, left click on the inverted triangle to the right of the track name and select 'Name', rename the track 'Pitch Change'.

Selecting Sounds to Process

Activate the selection tool by left clicking on it



☛
- Position the mouse at the beginning of the waveform picture.
- Left click, hold and drag to include the whole phrase.
- Do not include the second or so of silence before the text. The selected area becomes grey.

Pitch Change - The Chipmunks Meet Darth Vader

Go to Effect Menu>Change Pitch

There are several ways to shift the pitch of sounds. Try both ways and if you don't like what you've done,

Go to **Edit Menu>Undo** (Ctrl Z) and try again

Method 1	Method 2
Pitch from C	Percent Change
Select up or down	Move slider left or right (extreme values)
Select a new pitch letter	Select preview to hear a short version of the edi
Select preview to hear a short version of the edit	Select OK to make a permanent change
	Play the new edited sample

☛

Appendix 13: Music Creation Using Audacity – 2009

For full transcript see DVD Appendix 48

Music Creation Using Audacity - Activity 1

Audacity is an audio editing program that can record, playback and alter sounds and music. This activity is one of six tutorial activities designed to teach the fundamentals of audio editing in a directed and methodical approach. They are designed for individual and classroom music technology lessons. These activities work best on Audacity Mac/Win version 1-3-6. Further technical information regarding Audacity is available from http://audacity.sooourceforge.net

1A Playing the Music

Audacity is able to play, edit and mix many different audio tracks.
There are several ways of getting sounds and music into

1. Open the Audacity Program.

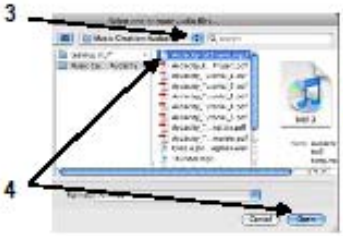
   Mac: *Move the pointer to the dock and click on the Audacity program icon. Alternatively you may need to use the Finder and locate the program in the Applications folder.*

   Win: *Move the pointer to the start button and click, then click on All Programs, then locate Audacity and click*

2. File Menu>Open.
   Move the pointer to the Audacity file menu, then select open.

3. Locate the Music Creation Audacity resource folder.
   Use the finder window navigation browser and follow your teachers directions

4. Select 'Audacity tut5 song.mp3' and click Open



5. Click Play and Listen.
   Move the pointer to the Control Toolbar and press the green play button or press the computer keyboard spacebar.

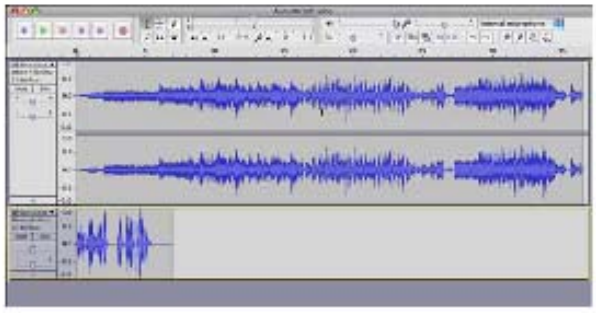
1B Importing Additional Sounds

Another way of getting sounds into Audacity is by importing audio into existing songs.
Do Not Close The Existing Song

1. File Menu>Import>Audio.
   Move the pointer to the file menu, then move downwards to Import and across to Audio.

2. Locate the Music Creation Audacity resource folder.
   Use the finder window navigation browser and follow your teachers directions

3. Select 'Once a Jolly Swagman.wav' and click Open. The Project window should look something like this.



4. Reset the Playhead to the start of the project.
   Move the pointer to the Control Toolbar and click on Skip to Start

5. Click Play and Listen.
   Move the pointer to the Control Toolbar and press the green play button or press the computer keyboard spacebar.

Appendix 13: Music Creation Using Audacity (p.3)

8E Evaluating Your Work

You will now use an evaluation rubric to grade your work. Read the descriptors for each process and then listen closely to your Activity1 MP3 mix . When you have decided upon a Total Score, enter your score into your word processor document. Select another student to be your Peer Assessor and have them listen to your mix and read your Personal Reflection. Record their mark in your Evaluation document

EVALUATION RUBRIC			
(score)	2	1	0
Processes Descriptor	Process is used appropriately. Some creative variation or personalisation is evident.	Process is evident but used in a fundamental manner. No personalisation evident.	Process not evident
Pitch Change (score)	/2		
Reverse (score)	/2		
Echo (score)	/2		
Wahwah (score)	/2		
TimeShift (score)	/2		
Track Panning Descriptor	A variety of sensibly placed positions	Minor use of panning	No panning evident
Panning (score)	/2		
Track Volume Levels Descriptor	Well balanced, no distortion	Small variation in track volumes, occasional distortion	Wide ranging volumes with regular distortion.
Volume (score)	/2		
MP3 Export Descriptor	Plays well. Stereo image is evident.	Plays well. but volume level is clipping	Has not been submitted in MP3 format or does not play.
MP3 (score)	/2		
Personal Reflection Descriptor	Section identified. Reflection explains intention and task process.	Section Identified. reflection does not explain intention or task process.	No section Identified
Reflection (score)	/2		

	Total Score
Self Assessment	/18
Peer Assessment	/18
Name of Peer Assessor	

Appendix 14: Preliminary Questionnaire: Investigating Music ICT Pedagogy

Preliminary Questionnaire ***Investigating Music ICT Pedagogy***

The purpose of this questionnaire is to identify research teachers with a range of teaching and Music ICT experience for participation within in a larger study Music ICT Pedagogy study.
The term 'Music ICT' (Information Communication Technologies) refers to computer hardware, software, instrument controllers, and internet use.

Name _____ School _____

1. ***Gender:*** Female ☐ Male ☑

2. ***Age Range:*** 20-30 ☐ 30-40 ☐ 40-50 ☐ 50 + ☐

3. ***Indicate the number of years teaching secondary school music.***
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10+ ☑

4. ***How would you describe your personal proficiency using ICT (not music related)?***

Very Competent ☑ Competent ☐ Fundamental ☐ Low ☐

5. ***How would you describe your personal proficiency using music ICT?***

Very Competent ☑ Competent ☐ Fundamental ☐ Low ☐

6. ***How often do you use the following within your classroom teaching?***

	Regularly	Occasionally	Never
A spreadsheet (eg Class Roll, Marks)	☑	☐	☐
Powerpoint/Keynote presentations	☐	☑	☐
Email submission of students' work	☑	☐	☐
Prepared worksheets/tutorials/task-sheets	☑	☐	☐
Multi-media activities	☑	☐	☐
Rubrics for evaluation/assessment	☐	☑	☐
Student peer-mentoring	☐	☑	☐
Student peer-assessment	☐	☐	☑

7. ***Explain which learning and teaching theories influence your classroom music teaching.***
Constructivism, mentoring, self paced/directed learning.

8. ***Explain your teaching approach to using music ICT.***
Dont tend to focus on structured step by step learning of ~~A~~ single applications'. More about using a range of skills + techniques that suit a particular music/media project.
ie The ~~to~~ 'applications' are secondary to the musical/artistic outcome.

Please return via email or post

Researcher - Antony Hubmayer, C/O Scotch College Adelaide, Carruth Rd., Torrens Park S.A.5062
phone: (08) 8274 4328 fax: (08) 8274 4247 mobile: 0402 827496 email: ahubmayer@scotch.sa.edu.au

Appendix 15: Questionnaire 1: Investigating Music ICT Pedagogy

Questionnaire 1 *Investigating Music ICT Pedagogy*

The purpose of this questionnaire is to provide data that establishes: background information, current uses of ICT, attitudes towards teaching using music ICT and the learning and teaching theories that influence you. The term 'Music ICT' (Information Communication Technologies) refers to computer hardware, software, instrument controllers, and internet use.

Questionnaire Instructions

Tick, cross or mark **only one** of the boxes given for each question

Example 1 Yes ❑ No ❑ Example 2 Disagree ❑ - Agree ❑ - Unsure ❑

If you wish to expand your answer please do so on this form or attach an additional sheet.

Leave a question blank if you are uncomfortable answering or you are unclear as to the meaning of the question.

Name _____ School _____

1. ***Gender:*** Female ❑ Male ☑

2. ***Age Range:*** 20-30 ❑ 30-40 ❑ 40-50 ☑ 50 + ❑

3. ***Indicate the number of years teaching secondary school music.***
   1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 ❑ 6 ❑ 7 ❑ 8 ❑ 9 ❑ 10+ ☑

4. ***Indicate how many music ICT training and development sessions you have attended?***
   0 ❑ 1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 ❑ 6 ❑ 7 ❑ 8 ❑ 9 ❑ 10 + ☑

5. ***How would you describe your personal proficiency using ICT (not music related)?***

   Very Competent ☑ Competent ❑ Fundamental ❑ Low ❑

6. ***How would you describe your personal proficiency using music ICT?***

   Very Competent ☑ Competent ❑ Fundamental ❑ Low ❑

7. ***How often do you use music ICT for school related composing, arranging or performing?***

   Regularly ☑ Occasionally ❑ Never ❑

8. ***How often do you use music ICT for non-school related composing, arranging or performing?***

   Regularly ❑ Occasionally (very) ☑ Never ❑

9. ***How often do you use the following within your classroom teaching?***

	Regularly	Occasionally	Never
A spreadsheet (eg Class Roll, Marks)	☑	☑	❑
Powerpoint/Keynote presentations	❑	☑	❑
Email submission of students' work	☑	❑	❑
Prepared worksheets/tutorials/task-sheets	☑	❑	❑
Multi-media activities	☑	❑	❑
Rubrics for evaluation/assessment	❑	☑	❑
Student peer-mentoring	❑	☑	❑
Student peer-assessment	❑	❑	☑

Gradekeeper ? not spreadsheet

10. ***Explain which learning and teaching theories influence your classroom music teaching.***

Haven't thought about it recently!! - Probably would include mentoring, construction, self directed, individually paced learning.

11. ***List the Music ICT tools you value most (software and hardware).***

Garage Band, Sibelius, Music Theory Net - Quicktime? Midi Keyboards, Digital Interfaces

12. ***Explain your teaching approach to using music ICT.***

Tool for exploring & developing musical literacy - Kids can usually teach themselves how to use the software (with a little help). Focus is mainly on the music.

Thank you for completing the first Questionnaire.

Please return via email or post

Researcher - Antony Hubmayer, C/O Scotch College Adelaide, Carruth Rd., Torrens Park S.A.5062
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Appendix 16: Questionnaire 2: Investigating Music ICT Pedagogy

Questionnaire 2 ***Examining Music ICT Pedagogy***

The purpose of this questionnaire is to identify: your preparation, expectations regarding teaching the activity, expectations regarding students attitudes towards the activity.
, attitudes towards and , personal aspirations.
The term 'Music ICT' (Information Communication Technologies) refers to computer hardware, software, instrument controllers, and internet use.

Questionnaire Instructions

Tick, cross or mark **only one** of these boxes.

Yes ❑ No ❑ ***OR*** Disagree ❑ - Agree ❑ - Unsure ❑

If you wish to expand your answer please do so on this form or attach an additional sheet.
Leave a question blank if you are uncomfortable answering or you are unclear as to the meaning of the question.

Name _____ School _____

1. ***How many hours have you devoted to the preparation of this music ICT teaching activity?***
   2 ❑ 4 ❑ 6 ☑ 8 ❑ 10 ❑ 12 ❑ 14 ❑ 16 ❑ 18 ❑ 20+ ❑

2. ***What level of student engagement would you expect from this teaching activity?***

   High Level ☑ Average ❑ Low ❑

3. ***List some of the student behaviors' that would indicate to you student engagement.***

   positive work effort, asking questions about how to achieve certain effects/processes. Showing interest in bringing in their own music/loops etc.

4. ***What would you anticipate student feedback or comments to be regarding this teaching unit?***

   Appreciate the music selected for the project, enjoy being able to re-create/experiment/bring their own taste to the sound of the remix. Comfortable using the software.

5. ***What best describes your confidence regarding the following computer related issues?***

	Very	Confident	Concerned
Software will run correctly	❑	☑	❑
Headphones will function correctly	☑	❑	❑
Computer network will run correctly	☑	❑	❑
Saving student work will function correctly	☑	❑	❑

6. *Discuss the support you have received from your ICT coordinator and/or support staff?*

   Not much - most ICT issues are solved on the spot teaching staff have as much if not more relevant experience with the specific software being used.

7. ***What are you looking forward to with teaching this topic?***

Students working with the "real deal" – putting themselves in the position of a music producer, being able to work with High quality recordings.

8. ***What concerns do you have regarding teaching this topic?***

Range of laptop issues potentially – mainly related to older models being able to keep up with more recent software.

Thank you for completing the second questionnaire.

Please return via email or post

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Appendix 17: Questionnaire 3: Investigating Music ICT Pedagogy

Questionnaire 3 ***Examining Music ICT Pedagogy***

The purpose of this questionnaire is to identify your views on issues that influenced the way you taught this unit of work.

Questionnaire Instructions -

Written explanations may be in point or sentence form. Tick, cross or mark **only one** of these boxes

Yes ❑ No ❑ ***OR*** Disagree ❑ - Agree ❑ - Unsure ❑

If you wish to expand your answer please do so on this form or attach an additional sheet.

Leave a question blank if you are uncomfortable answering or you are unclear as to the meaning of the question.

Respondents are encouraged to record their spoken responses in an audio recorder (e.g. Audacity) and forward it via email to me as a MP3 file.

Name _____ School _____

1. ***How many class lessons were devoted to this Music ICT Remix project?***

1 ❑ 2 ❑ 3 ❑ 4 ❑ 5 ❑ 6 ☑ ? 7 ❑ 8 or more ❑

2. ***What level of student engagement did you see during this teaching activity?***

High Level ❑ Average ❑ Low ❑

3. ***List some of the student behaviors' that indicates this level of student engagement.***

Working on the project at home, planning / thinking about a range of possible approaches / ~~or~~ styles /

4. ***What percentage of students:***
   - ***Continued to work on their Music ICT activity outside of class time?*** 50%
   - ***Completed the planned curriculum?*** none. missed lessons, continuity

5. ***Explain how this activity was designed to promote student understanding.***

Demonstrating creative & technology processes, using real ~~to~~ examples, giving students a chance to explore.

6. ***In this class and topic, explain what role gender may have played for students in their approach to the learning activity.***

One Female student, probably not typical

no comment

7. ***Describe how students who missed lessons were able to 'catch-up' and continue the learning activity.***

laptop used mainly – allowed for work at home

8. ***What student feedback or comments have you received regarding this teaching unit?***

Generally enjoyed process - opportunity to explore their own musical tastes – manipulate a well known recording.

9. ***Describe how you evaluated student understanding during lessons and at the conclusion of the unit.***

Individual discussion, observation of techniques/use of software, evaluating the "completed" work.

10. ***Identify how well the following ICT related devices or procedures functioned?***

	Faultless	Reliable	Unreliable	Inadequate
Audio Software	☐	☑	☐	☐
Headphones	☑	☐	☐	☐
Computer network	☑	☐	☐	☐
Saving student work	☑	☐	☐	☐
Submitting Student Work	☐	☐	☐	☐

11. ***Indicate approximately how many minutes per lesson were devoted to the following activities***

Student behavior management	5	minutes
Whole class explanation	10 – 15	minutes
Roaming and activity assistance	20	minutes
Solving computer/software issues	5 – 10	minutes

50 min class

12. ***Indicate how often you required whole class attention to deliver instructions during a typical lesson for this Music ICT activity?***

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 or more ☐

13. ***How often did students listen to other students work during a typical lesson for this Music ICT activity?***

1 ☑ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 or more ☐

14. ***Explain how peer teaching and peer assessment occurred within this music ICT activity.***

Both occured in an informal, casual way. Teaching/help as necessary, assessment usually at end of lesson to show + tell.

15. ***How would you describe your teaching role during this activity?***

Demonstrating, guiding, mentoring,

16. ***Explain any adjustments you made to your teaching style during this music ICT activity.***

As the activity progressed teaching became more directed at individuals, helping to work through technology + creative issues.

17. ***What concerns do you currently have regarding the effectiveness of teaching this unit of work?***

lessons would be better time tabled as a block. need to keep the skills, thought processes fresh in mind.

18. ***Describe any external factors that had an impact upon student learning during this unit of study.***

Student absence, excursions made a one week gap into two weeks.

19. ***Explain how this learning activity reflects your philosophy towards education.***

Use of technology in a creative process, exploring, investigating.

Thank you for completing the third and final questionnaire.
Please return via email or post

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Appendix 18: Mick - Observation 1

For full transcript see DVD Appendix 49

Class has setup using their notebook computers and a mixture of supplied headphones or their own. Mick is using his own notebook connected to a data projector, He has directed students to navigate to a resources folder to download project stem files for a Garage Band remix activity.

Mick: Once you have got that file, let me know and then ignore your computer or laptop for a while and watch me. ... A point of interest to those who have just walked in is the PDF document which is attached to an email entitled 'Remix Project' that has been sent to you in the notices. Just make sure that you have it. Make sure you open up the PDF so that you make sure you have that there. You don't have to refer to that now. I want you to check that again, put your computers aside and then we can have a chat and a listen and a discussion about how we can do this.

M was scanning the room while remaining seated at the front of the room. Having noticed a student experiencing some troubles he talked him through the saving and placement of the file resources from the 4m distance. (M was able to see the students' computer screen)

2.00

M: Well is that all happening for you? (to the whole Class)

Student: What do you mean?

M: I hope you have been doing this R>> because if you haven't we've been wasting time.

S: I've been doing this..

M: Ok, there is another document I have sent you in the workspace in there, yeah

S: (another Student) I can't log on (another student had logged on using their password and was blocking their access)

M: You logged on using M>>> password, why did you do that
S: Because I didn't know my password

M: That's a fundamental problem isn't it E>>>? Can you log out and quit that and we will just have to wait because that's just not fair.

2.50

M:: Can I have your attention then? Take your earpieces out and leave your laptops alone.

Another S: Doesn't want to work (download)

Appendix 18: Mick – Observation 1 (p.2)

M: We'll copy it some other way the D>>> . We'll just have to deal with that.
R>> can you move your laptop right out of the way. I don't want you watching it. And you can just ignore them for a while as they are downloading the file (a large file size 200 MB). Ok we were talking about remix stuff last week. And we were in fact listening to Duran Duran and I went around and had a look around the place and found something that may be a little more contemporary. And I've decided that we are going to do Fall Out Boys, American Sweethearts. Have you all heard the song? I'll just play it from the actual Garage Band file we have here, this is probably not exactly the same as the radio version or whatever it is but it will give you an idea of the actual song . (talking over the top of the song intro) This is what you are going to get on your laptop.

Some students had not heard it before

M: We'll finish on the Chorus and then discuss it. *Only half the class had heard the song or recognised it*

(Interesting implication with choosing popular music songs and contemporary music's, common knowledge songs are not necessarily to be taken for granted. Pedagogy implication is to expose and educate them about this music if it is to be the vehicle for musical education.

5.20

M: So you might recall we chatted last lesson about what a remix was. We decided it was where you take the basic ideas from ones song and then bring a different idea to it. A different style, a different drum beat or whatever you have. By combining different bits you create something new that is using some of the same content and some new or to put it another way, using the idea of the song that is usually associated with the lyrics and vocal parts using that to create something completely new. There is a little bit of a blurb about that in the remix document project and you can have a read of that a little later on. We are going to do some listening. Now I went on line. Because 'Fall Out Boy made all of this available, Anybody could download it and post remixes of it on YouTube so these are some of the remixes. What I would like you to do is get each of you to comment on each version
(numbered the class members) Comments are about do you like it? What sort of style maybe is there something interesting about it, same thing for each of you. OK, here's remix number one..

(Important pedagogy – listening to remixes to demonstrate what is possible, provide a model..)

6.54

Skips a bit when listening – a taster

7.40

M: R> a quick couple of comments

S: No guitar

M: No guitar, can you put a label on it, what sort of style is it anything you could.

Appendix 19: Mick - Observation 2

For full transcript see DVD Appendix 49

1.58

Mick: If you could just get your America's Sweetheart thing out and just do a little bit of work on it while I run up the technology so that we can see and then we will be looking at some of the skills that I hope you have got. You may already have them but we are going to go through a checklist of things and see how we go through it. About 5 or 10 minutes on as you continue to work on it, get some headphones so that you can hear them.
Put the headphones on please

2.44
Student suggests we should all listen to them, M says at the end of the lesson we can do that

3.00
M redirects students to their own space to work

3.26
Directs student to the table so that students are not so far away. Questions about some students absences.
Invites students to ge closer to 'the hub' of activity, rather than sitting in the corner of the rooms.

M: So another 5 minutes of just warming up those audio techniques, getting some loops together, putting a few beats in it and then we'll have a quick chat.

Reminds a student to get headphones on and working, M names students to keep them on task.
I can see by the look in your eye that you are not doing what you are supposed to be doing. I also know the project does not look like that. So open it up please with the right file. Are you in the right sort of login? (M goes over to assist- directs them to log in as a student)

6.00
M gets a pair of headphones and adaptor and moves around the room to listen to the student work.
Directs student to find the best bit – 'most Excellent' – he chooses from the start.

7.00
M: (Feedback to student) I thought that was very deliberate what you have done with the drum and bass, where you have got there you should start the drum and Bass stuff happening again. That's a nice little break. That's a really good build up from the beginning. Is there anything that's not quite right about it?

Student: The vocals aren't synchronised with it?

M: Well, the vocal rhythm is alright but it's something else to do with how the melody sounds against the other instruments.

S: Do you mean like harmony chords from the bass and keys?

M: Yeah, any idea how that can be fixed easily?

S: No

M: Well think a bit harder 'cause it has something to do with your loops

S: Do you mean like finding a different sound or shifting the pitch in some of the loops.

M: Well, some loops can be more major or minor sounding so choosing different loops might work but if we take a look at the chord chart in your resources and shift the loops to match the chord progression they will probably work better. You should ask XXX because they have been using region pitch shifting quite well. Later, we'll be listening to some of the remixes so I'll expect to hear some pitch shifts in yours so get moving and ask XXX.

8.15:
Moves to next student.

M: Can you just pull the thing out so that I can have a listen to what you are up to?
Computer has inbuilt speakers so it is audible. M comments, "I like that new beat"

M: (feedback) That's enough. I like the beats you've got going there. Are you working on changing some of these notes there? Do you know what some of these chords are?
M Uses questioning approach

M has a prepared chord progression chart that is stored on the server with the support material and now places it on the data view. Some students notice while others continue to work oblivious to it. In this instance M chose not to break the class concentration (Intervention) on the activity to direct all students' attention to the chord chart.
Small class group enabled M to adapt a personalised approach to feedback to students.
Moves to next student:

10.00

M *Laughs due to humour of mix – replays the mix.*
M: That is completely different, I think where the pre-chorus comes in a bass line could come in, that sounds very much like an introduction to the thing, but you then introduce another little par, a layer of texture and build it up slowly it keeps us all going because I think this thing is just going on and on, It gets repetitive (student mentioned irritating to describe it) You can solve that problem by adding something else like a bass note, and what are the chords there – B to G *(M points to data projection with the chord structure of the song showing)* If you can find some guitars that fit that. You will need to shift the pitch of .

12.44
M: What's W got up to? (Student says 'Nothing')

M: That looks like the whole thing –(*Student is still finding the beats and other instruments but thinks they have decided on several*) *Mick advises him on deleting tracks he is no longer using, asks the student how do you delete a track?. (Student demonstrates.)*

Appendix 20: Mick – Interview 1

For full transcript see DVD Appendix 49

AH: So how are your remix lesson preparations going?

Mick: Pretty well considering. I gave it a fair bit of thought and as you know I settled on the song stem ideas with Garage Band. During the last few weeks of last term and the holidays I searched for a few songs but I was a bit disappointed with the range of song stems that are out there. I thought there would be a whole lot more but I only found about 4 that were easy to locate and would suit what this activity will be about. I toyed around with using a Duran Duran song but I just couldn't bring myself to relive the eighties so I settled on a song by Fall Out Boy called 'America's Sweetheart'.

AH: So what have you been doing with these song stems.

M: Well thank you for asking… I've been creating my own remix and having lots of fun.

AH: And fun would be…

M: Lots of experimenting and working out the simple things to do with the mix that sound effective but are manageable for students and the Garage Band software. I've found that stripping the song back to just the vocals is most effective as then everything you add on top can pretty much change the style of the music. As the song files are already 'beat mapped', this makes it simple to speed up the tempo or change the key of the song. From my experience though, you probably don't want to do that. It does mean you can shift the key of any Apple loops you bring in and they will match the vocal tempo which is really useful.

AH: So have you created anything that I can listen to?

M: Sure, just give me a minute to load it and connect to the speakers.

2.00

Plays example

AH: Wow, that sounds pretty good, are you going to use that with your teaching

M: Probably, but I haven't quite finished it yet. I'm wanting to put in more variation – or a breakdown bit but time will tell. I reckon having a change in the texture will be an important thing to point out to the class as often Garage Band songs get very cluttered with loops that don't blend well together.

AH: Why is that?

M: It's too easy just to keep dragging things in and as the song keys can quite often be minor rather than major, you can get this really flat 9 sound and flat 7 sound that doesn't work too well with the major scale riffs. Even the un-tuned percussion can be problematic if you're not discerning.

Appendix 20: Mick – Interview 1 (p.2)

AH: Have you given much thought to how you are going to teach this?

M: I'm part of the way through creating a task sheet for the activity and this is based on my notes I made while I was experimenting with making this track.

6.00

AH: So what sort of notes did you make?

M: Just some music devices and a few software processes that can achieve these things

AH: Can you give me an example?

M: Well, if you want to use an upbeat to a phrase you would need to split the loop and resize it's length to match a quaver or crotchet or some other length., My notes kind of outlined how to do this but it was in my own shorthand. Basically though you need to set a grid resolution and then cut or trim up the loop. You then need to drag the start or end point to the correct position and resize the loop length for the right number of beats.

AH: So how are you going to teach that?

M: I'll list that technique and others as a skill on the task sheet and I'll demonstrate it or have a student follow my instructions and be the demonstrator. I'd eventually get the other students to repeat the process but in their own way and applied to their own example.

AH Is this basically show and do teaching.

M: Well, No. I try not to make it that dry but the concept is similar because in the end, they somehow have to see and understand what is possible and having someone demonstrate it though what I call a guided process saves producing a lot of resources.

AH: What happens for the students who may miss these directions due to being away from school or that lesson or were just not paying attention or just forget.

M: You ask too many difficult questions… For me, you have to work alongside the students letting them take their learning where they want to go so there is always the opportunity of revising and revisiting but I might get another student to help them.

AH: What are you most looking forward to with teaching this topic?

M: Seeing how the students enjoy working with the a real song and watching how they respond to being creative with all these possibilities. It'll be interesting to hear just how much they can remix the song and it still sound recognisable and effective.

Appendix 21: Mick – Interview 2

For full transcript see DVD Appendix 49

AH: That was your first lesson on this topic

Mick: Yeah, it was not how I planned it would go but we still got through the foundation stuff. I got a bit annoyed at trying to pre-empt all the possible technology hurdles that kept arriving but that is something you get better at solving. There were some things I could do nothing about today so that's why I said I'll prepare two different loads of the songs for the next lesson *(to accommodate different versions of the Garage Band software).*

AH: Tell me about how you planned to start the lesson.

M: I really wanted to have them listen to the different remix versions of 'Sweethearts' and once they were enthused and engaged , start a hand's on editing activity – setting up their bed tracks – but only half really got a start so that was not so effective.

AH: How do you think you made the lesson effective because it looked like the students were responding well.

M: Yeah, they were pretty good considering all the hassles. I think the discussing of mixes which was always intended kept them focused as the resource loading gradually failed…. Mmm.. I was also always going to go through the task sheet and that kind of happened but I'll pick up more on that next lesson.

AH: Your coaching of the student demonstrator, do you use that method often.

M: I suppose I do but it's more a way of maintaining class focus and keeping it about the students than something I'm really attached to.

2.00

AH: You used a lot of open class questions, is that deliberate

M: Yeah, I like to throw it out there, and keep them thinking. Sometimes it works, other times it's individual questions and that can make students very nervous, 'Will I be Next?'

AH: Where you always going to play your own prepared version

M: Yes, but I was going to save that up for the second lesson but that had to change as I thought the software overview was losing their interest a bit. I thought it got a good reaction from the students so maybe I'm in the wrong game!

AH: What were your reasons for making your own remix?

M: I've found that I'm more helpful to students and I think I teach better if I have a good understanding of the finished product. For me, that means doing it myself and experimenting with various ways and that helps me think through how to get this stuff across to kids.

AH: Where do you see the next lesson going?

M: I'll try to get a few more computers working correctly but I'll also set up a few of the iMac's just in case. Thinking about it , I probably should have done that today but we live and learn. I'll also go over the task sheet and the skill's list and I've actually got another list that has the music devices and the software processes listed so I'll give that to them as well. The lesson though will have to be about individual work time; just so that they get inspired to continue working on this stuff when they are not in class. I don't think too many people realise how long it takes to create this sort of music. Well at least I know how long it takes.

5.00

AH: Are there any particular remix skills you particularly want to cover and how will you teach these?

M: It's probably more about blending musical styles than really tricky editing. I want the kids to explore a variety of loop styles and blends and so each one (remix) is going to be different and I reckon it would be fair to expect some students will want to create their own loops from other songs so I guess I'll cross that bridge with them later. It would be good if a few got up to some interesting structural changes and maybe some clever use of FX's. I'll just tailor most of my advice once I see how each is going with their remix but as a minimum I want to get each of them comfortable with the skills list. Well that's at least the plan.

AH: How will you be assessing this learning.

M: I jotted down a few ideas on the task sheet and they provide a good focus but there are no grades etc so I'm planning on making a simple rubric and that will hopefully pick up on the suggested criteria and link that to some different indicators of really 'good to not so good' and then tie it all together into a "lovely bow" . In other words, I haven't quite finished that yet, but an outline is there and I'll develop that.

Appendix 22: Mick – Interview 3

For full transcript see DVD Appendix 49

AH: So you've just had your second to last lesson on this topic, how is it going?

Mick: Look, the teaching is fine and there is some really good ideas coming through in the work but this lesson, on this day, just too many interruptions. This would ideally be better off taking up two lessons a week or even toward the end of the term we won't have theory won't have prac for a week and we are just going to go through this and while everything is fresh in peoples' minds so you're not actually having to reteach skills or anything like that. I think they are all fairly enthused about it when they got the stuff in their hands and laptop and if you were then saying we are going to concentrate on this over a block of time I reckon they would go home and do some stuff. Whereas the fact that it has been spread out over things, we have missed a week because of Sport or Cross Country it just sort of takes the edge off the enthusiasm and excitement the kids have got with that first thing, oh we've got this piece of music here that we could be doing something with. So I reckon that's probably a factor as to how motivated they are to actually go home and do it. Dylan and Will are just working on those machines so they really can't go home and do anything on it so for them it would be better if I think the continuity was better. But It seems to be the thing I'm thinking about this is that it's too spread out . Are the other teachers teaching it like once a week or are they doing a couple?

1.30

AH: A real mixture, Often it is once a week, every school's got different resources for bookings available because they are usually going outside of their own facility and so I think they just work around, often it's a week but some will do it for two weeks and then have a couple of weeks off for various reasons.

Mick: The other thing that I do that is on that sort of project sheet is there is a little week by week sort of what we would like to be at sort of a target. It says OK by this week we were meant to be concentrating on mixdown you know the balancing of things but..

AH: So would you say that you have had to adjust that quite significantly because of those.
Mick: The idea that we might be able to go through and learn not just a new skill in Garage Band and look at a different area of the process, like the first thing would be experimenting and listening and making decisions and the next one is – I can't remember what I had. There were a series of things that were developmental in the process. Getting the basic rhythm tracks in was one week and then adding some spice was the next week, and then fiddling with the vocal tracks and then doing a mix were ideas for what we could be doing. Of Course that has just disappeared out the window as the timeline shifts and kids forget what they have just done. You could probably reasonably predict that that was going to happen

3.20

AH: The scheduling of the lessons closer together well it might solve some of those problems a bit so that answers our homework question. Not much being done for home?

Mick: Yep

Appendix 22: Mick – Interview 3 (p.2)

AH: You have suggested ways that you would change the next way you would teach the topic, have you noticed any change in the way you have taught this topic as you have progressed through it.

Mick: Have I noticed any changes, Pause

AH: Or has it pretty much gone the way that you normally teach

Mick: It's, Pause

AH: You look like you've adapted that sharing

Mick: Yeah that's just something that I thought Oh well here's an easy way to usually quickly if hadn't been talking about other things.

AH: Thant changes your pedagogy somewhat doesn't it? Because they are then going to have a chance for everyone to listen

Mick: When I think about it, I shouldn't have bothered talking about creating a loop from an existing song. At the same time if these kids are going to go away and use these tools and really explore it's full extent, the way this was developing it really was becoming more of just an introduction to the concept of just playing with it and we weren't I can't see us really getting some concrete product out of it unless these kids go home and spend hours and hours on it, time on it, because it takes a bit of time to come up with something. And so I suppose what I was thinking there was that a lot of these kids have got an interest in this sort of thing and if you let them know what is possible they might go out and start playing with it. So it was more, I just wanted to throw that one in there because I knew that XXX was dead keen to get some of his music into it. I thought this is how you do it. XX seemed to be interested in that idea as well. I don't know about the other guys but it's a way that they can personalise it a bit more

AH: So you were responding to their interests and tailoring the learning to suit the certain aspects of the class

5.30

Mick: Even if they didn't pick up on every little element of the skills or the steps that are required to do that, just alerting them or awakening them to the possibilities I think is one of the biggest things with this sort of technology. Mm the idea of. I don't necessarily think the idea of having to learn every single skill in the software before you can sort of progress to the next level. I don't really sort of subscribe to that. I think it's a matter of finding out what you need to get your solution. I want to do this so that's why I want to know how to do this.

AH: You worked the example first though didn't you

Mick: Yeah I went through the example myself, I had you know, I thought you can do this, you can do this, and then I thought what are the things that I have done here and you know, probably expecting too much of the kid. Looked at what skills I had to have to do that and then thought well….

Appendix 23: Mick – Task Sheet

GargeBand Remix Project

America's Suitehearts - Fall Out Boy

The idea behind a remix project is to take an existing set of audio files relating to a song and re-produce the song in a way different to the original. This can transpire in many ways. Change of tempo, form, style, instrumentation, harmony, rhythm etc are all things that are possible. The best remixes are those that bring something new to the song - there needs to be some creativity and experimentation in order to be successful.

Listen to the examples of America's Suithearts remixes and think carefully about how each "arranger" has approached the song. Note the style, form, instrumentation & texture.

Finding a new concept
Open the GarageBand file and remove the existing rhythm section tracks by clicking on a track and using command - delete. Leave just the the lead vocal and harmony parts. Save your GB project with a new name

Drums and percussion are a major way to instantly change the mood or style of a song. Explore the loop browser for a new drum pattern that might fit the song. Audition loops in the browser by clicking on them. Drag a loop to the arrange window to hear how it will sound against the vocals. Take note of loops that you like by marking them as favourites in the loop browser so that you can come back to them later.

Inspiration tip - think of some different song that you know of with interesting grooves and work out what makes them groove.

Once you have found a new drum/percussion loop that you like, find some bass and guitar/keyboard loops that compliment what you have.

Many of the GarageBand loops are organised in collections that have similar but slightly varied drum patterns, drum fills, bass and guitar/keyboard parts. Using different loops from these collections can give you some variety without having to change style too much. This could be a starting point for gathering loops but don't be scared to experiment.

Form and texture
Listen to the original song and some of the remixes again. Hear how they use different textures of sound within different parts of the song. You should do the same build the complexity as you move towards the chorus, change quite dramatically in the bridge, think of an interesting intro.

The organisation of the song doesn't have to be exactly the same as in the original but the songwriters probably got it mainly right. You can muck around with beginnings and endings, bridges or break sections without compromising the overall sense of a song too much.

Adding spice
Little things can make a big difference. Adding a triangle or other percussion sound here and there, cutting up a vocal line so that it stutters, cutting the drums or other instruments for just a bar to highlight something else. Just be careful - more isn't always better.

GarageBand Skills list

Skill	
Add/delete tracks	apple delete
Enable/edit arrange track	show arrange track
Use zoom controls	
Browse/add loops	Open browser window, search, click to play loop
Move loops/regions	Click and drag
Trim/cut loops/regions	Hover over lower beg/end of region, click and drag
Loop loops/regions	Hover over upper beg/end of region, click and drag
Change track volume	Track volume slider
Pan tracks	Track pan dial
Solo/mute track	speaker and headphone button in track header
Edit track effects	Show track info window, choose & edit effects
Use track editor	"Scissors" button, (lower left) or dble click region
Change audio loop pitch	Open in track editor, use pitch control
Edit MIDI loop	Open in track editor, use pitch control
Track automation	down triangle in track header
Snapping/grid tools	Rulers - top left of arrange & track editor window

Your remix must have :

New drum/percussion parts with changing patterns and fills, some new harmonic guitar/ keyboard parts, rearrangement of song form, change in texture, pitch change of audio region, track automation - volume & panning, editing of existing vocal parts.

Optional techniques : MIDI editing, custom EQ/effects, track automation of EQ, delay, reverb, introduced/ripped/own audio/loops.

Criteria for assessment will include skills and knowledge in using GarageBand, creativity in reproducing/rearranging the song.

Appendix 23: Mick – Task Sheet (p.3)

Project Timeline

Week	Activitiy/Task
2	Listen to & discuss remix examples. Open GB project and begin exploring style
3	Create basic rhythm tracks, chord structure
4	Harmonic & spice tracks, effects
5	Edit and rearrange vocal parts
6	Balance mix, tidy up, last minute ideas, export
7	Self and peer assessment

Appendix 24: DECS Research Approval

Department of Education
and Children's Services

Government of
South Australia

Office of People and Culture

Education Centre
31 Flinders Street
Adelaide 5000
South Australia
GPO Box 1152
Adelaide 5001
Tel: 8226 0119
Fax: 8226 8890

DECS CS/04/5324.6

10 April 2006

Mr Antony Hubmayer
Graduate School of Education
245 North Terrace
ADELAIDE SA 5000

Dear Mr Hubmayer

Thank you for your letter requesting approval for your project *"Examining Music ICT Pedagogy'*

Your project has been reviewed by a senior DECS consultant with respect to protection from harm, informed consent, confidentiality and suitability of arrangements. Subsequently, I am pleased to advise you that after careful consideration your project has been **approved.**

Please find below some comments made by the reviewer for your information along with the reviewer's contact details in order for you to clarify any queries or comments made.

"Selection of Research Teachers"
The researcher is encouraged to include a range of school demographics.

"Observation of teacher and student interaction will occur on two occasions; no students will be interviewed or surveyed."
The researcher and teacher must explain clearly to students participating in the observed classes that the classroom teacher is the intention and focus of the observation and that they should not enter into a dialogue with the researcher.

Manager Music Programs, Level 5/31 Flinders Street, DECS. Ph: 8226 1087.

If changes have been requested for your proposal, please supply the department with an electronic copy of the changes made as well as an electronic copy of the final report, which will be circulated to interested staff and then made available to DECS educators for future reference.

I wish you well with your project.

Lexie Mincham
MANAGER, NETWORKED LEARNING COMMUNITY

Appendix 25: Research Participants Invitation for Music ICT Research

Invitation to participate in Music ICT research.

Dear Colleague,

This letter is an invitation for you to participate in a research study that will examine how music teachers teach using Music ICT. I am currently undertaking studies towards a Doctor of Education degree through the University of Adelaide. As part of these studies I am focussing upon teaching pedagogy with regard to Music ICT.

I am seeking 10 teachers to undertake a series of 6-8 lessons focussing upon a 'Remix' music arranging activity for a year 7-8-9 music class. I will provide teaching resources and software training however, you are not required to teach using these resources and may use any software and self developed resources that focus upon a 'remix' activity. Research teachers would be expected to discuss and reflect upon their teaching methodologies in addition to allowing an external observer to watch two lessons. I am planning to conduct the research during Term 2, 2009.

Detailed information regarding the teaching activity, participation expectations and research methodologies are attached.

Formal approval to conduct research within schools is required by all State, Independent and Catholic schools. I have attached a letter of approval to conduct research within DECS schools and this letter should be shown to your school's principal.

I am seeking interest from secondary music teachers interested in participating in this research. I understand that you may like to discuss the time implications and commitment for this research and I welcome the opportunity to explain and explore the possibilities. My phone contact is 0402827496.

Should you wish to be involved in the research, please complete the attached Questionnaire and Research Consent Form and return to me by Monday 16 February 2009.

Thank you for your consideration.

Antony Hubmayer,

January 2009.

Head of Performing Arts
Head of Music
Scotch College Adelaide
Carruth Road,
Torrens Park, 5062
Phone:

Appendix 26: Research Participants Explanation

Antony Hubmayer
University of Adelaide
School of Education
Doctor of Education - Research Project 2

Research Topic

Teacher pedagogy within designed Music ICT learning experiences: examining the pedagogy of secondary classroom music teachers with regard to an extended music re-mix class activity using music ICT.

The study will examine teacher design, delivery and assessment of a music ICT audio remix activity and identify to what extent the pedagogy reflects constructivist influenced teaching strategies.

What is required of research teachers?

- A commitment to teach a Music ICT remix activity. (between 6-8 lessons)
- A willingness to discuss and share lesson preparation materials, assessment plans and lesson plans/outlines
- Participation in a three hour explanation and training session.
- Completion of four questionnaires.
- Participation in three, fifteen minute interviews.
- Permission for a researcher to view two lessons.

What is required of research schools?

- Teacher and class access to a music equipped computer laboratory for the duration of the research (6-8 lessons).
- Computer technician assistance with: the installation of software; setting audio preferences; network privileges for saving student work.
- Permission to observe the teacher teaching.

What technical resources are required?

A computer laboratory of audio equipped computers (headphone output and microphone input) suitable for a school class:

- APPLE Mac OS10.4 or higher - Windows based PC XP Vista or XP.
- Audio editing software: this could be any entry level audio editing software (eg. Acid Music, Garage Band, Sonar Home Studio, and Cubase) however, the provided activity resources are designed for Audacity version 1.3.6 (cross platform, freeware).

Selection of Research Teachers

Approximately 10 research teachers will be selected who will represent a range of teaching experience (years) and self-rated confidence using ICT. Research participants will be approached via a general email to music teacher groups as well as personal invitation.

Duration of Research

Initial invitations and circulation of resources would begin in February 2009. Teacher training would be conducted in March 2009. Research would be conducted during term two of 2009. The teaching activity is anticipated to take approximately 6-8, 40 minute lessons.

Ethics – Anonymity

School names and teachers names will not be mentioned in any discussion of research findings.

Observation of teacher and student interaction will occur on two occasions. No students will be interviewed or surveyed.

Research Teaching Activity
Students manipulate, modify and rearrange an existing audio recording of their own choice to create their own 'remix'.

This activity was identified in response to a self developed Music Technology Curriculum Survey that asked secondary school music educators a range of questions that established a sample of typical uses and the frequency of uses for music technology in their curriculum.

Teaching Resources
A series of activities titled 'Music Creation Using Audacity' have been developed by the researcher and these are available from www.musiccreationworld.com. An explanation of these resources is attached from a recent conference presentation.

Training and ICT Skill development of Research Teachers
Teachers will receive a structured support program including a three hour training session on strategies to plan and teach the activity. This will include:

- Music ICT training
- Detailed skill development using the resources 'Music Creation using Audacity'
- Teacher directed discussion regarding implementation strategies.

Can I use my own resources?
Yes. All research teachers may choose when and how they deliver their course and to what extent they make use of the provided teaching resources and any suggested pedagogy.

Student Year Level
Years 7, 8 or 9. (12-15 years of age)

Research Methodology
The research will be a mixed method qualitative methodology that will gather data through Documentation, Observation, Questionnaire and Interview.

- Analysis of teacher designed resources (teaching and assessment plans, worksheets, resources)
- Personal Observation 2 lesson
- Video observation 1 lesson
- Three interviews pre-during-post (approx. 15 minutes)
- Three questionnaires - one prior to data gathering, one during and one post (distributed prior to interviews)

Research Indicators
Analysis of the data will focus upon identifying the use and emphasis of the following: Your approach to curriculum planning and teaching preparation, identifying specialised teacher knowledge unique to Music ICT, teacher and student centred learning examples, designing for student understanding, facilitation, questioning techniques, conceptual teaching, individual and group work, consideration of student learning styles, strategies for mixed ability class groups, intervention frequency, classroom management techniques, evaluating student understanding, advanced organisers, process worksheets, worked examples, scaffolding, student self direction, collaborative and peer mentoring, performance and discussion, evaluation rubrics, student self assessment, peer assessment, student and teacher self-reflection.

Appendix 27: Music Creation Using Audacity Resource Explanation

Music Technology – Remix Activities and ICT Music Teaching Pedagogy using Audacity

Mtec09, Melbourne, Australia, Wednesday 21 January 2009
Antony Hubmayer (Head of Performing Arts, Scotch College Adelaide)
ahubmayer@scotch.sa.edu.au www.musiccreationworld.com

Remixes are a great way of engaging the musical imagination of students. These activities are designed to be a teaching and learning resource for class groups and individuals from age 12 onwards. They introduce the fundamentals of audio manipulation using the free, cross platform audio editor, Audacity. http://audacity.sourceforge.net

The activities have been designed to support my own classroom teaching as well as explore practical broader pedagogy issues with regard to instruction using Music Technology. They are not lesson plans. They will continually be a work in progress.

My Criteria for Activities:

- Are simple for students to follow
- Engage students imagination
- Develop authentic musical skills
- Accommodate learning styles
- Allow experimentation
- Create a performance
- Develop skills that can be further developed
- Are easy to teach/adapt
- Provide meaningful evaluation/feedback/assessment
- Efficient with class time

Specific Music Technology Criteria:

- Multiple entry points for students (computer/audio/music)
- Develop specific music and audio manipulation skills
- Self-paced and self-directed
- Are sequential and provide milestones
- Provide structured support (scaffold) that is gradually removed
- Allows for missed lessons (absences)
- Provides a continual feedback loop (self and peer evaluation)
- Reinforces safe ICT practice
- Does not need to be on-line

Resource Components

- Six Activities (150 pages) in PDF format
- Audio samples for the Activities

Activity Design

Activities are divided into step hierarchies. Eg. Activity 2-Part 2C Step 4
Initially, the activities and steps are prescriptive and require the student to follow a sequential order. Each Step has a concise instruction followed by a more detailed 'how to' in italics. A screenshot image with guiding arrows is also provided.
Supporting this will also be a video demonstrating the Part and its various Steps.
Evaluation/Assessment is designed around a self and peer evaluation rubric with teacher moderation.

Activity Content

Activity 1 - Modifying Sound Recordings

Spoken text is imported, duplicated, modified and exported.
Activities include: Importing sound files (MP3), Selecting Sounds, Duplicating Tracks, Effects (Pitch Change, Reverse, Echo, Wah Wah), Track Pan and Volume, Mix Down to MP3.

Activity 2 – Rearranging Text

Spoken text is imported, split, rearranged, a stutter effect added and Mix Down to MP3.

Activity 3 – Microphone Recording

Activities include: Audio Settings, Microphone Recording, Low Pass/High Pass Filters, Delay, Reverb, Inserting Silence, Mix Down to MP3.

Activity 4 – Assembling Drum Loops

Drum loops matched to 120 BPM are assembled into a Verse, Chorus structure.
Activities include: Generating a click track, Copy and paste, Volume Envelopes, Fade Out/In, and Mix Down to MP3.

Activity 5 – The Remix

A completed MP3 song is imported and modified using arranging, processing and editing techniques from Activities 1-4.

Activity 6 – Your Own Remix

An own-choice MP3 song is imported and modified. Task steps are described in general terms and assessment criterions are provided.

Pedagogy Considerations

I am influenced by a range of learning theories and teaching models: Cognitive, Constructivist, Authentic Learning, Learning Styles, Observational Learning and Multiple Intelligences.

Presentation Ideas Lesson 1

Set up the topic - create interest (Play examples); Question what they thought; Establish opinions and prior skills of class; Begin process of identifying potential helpers; Introduce Big Topic; Question Brainstorm (How do you think we could do this? What do we need? What gadgets would professionals use?); Present Solution; Share the activities/resources that will help; Demonstrate and teach how to use the resources; Install software and configure as required. (end of lesson)

Presentation Ideas Lesson 2

Students begin activities immediately; Praise good process - Buddy students/change seating; Recreate interest - may have some remix music playing as students enter and get organized; Show interest in students. Informally ask what they are listening to and why they like it. Do they think I'd like it. (Model curiosity and learning behavior); Refocus upon activity - revise how to use activity resources; Play them a finished example of the first activity; Keep configuring software, check student combinations; Towards end of lesson explain the evaluation process. Ask if there are any students that want to play their work in progress?

Resource History

These resources began in 2005 and the current design format is in its fifth generation.
Influences upon their development have come from: student feedback, teacher feedback, personal research and software improvements.

Appendix 28: Research Participants Consent Form

Examining Music ICT Pedagogy

RESEARCH CONSENT FORM

I _____

hereby consent to my involvement in the research project entitled:

Examining Music ICT Pedagogy
Examining the pedagogy of secondary classroom music teachers with regard to whole class music instruction using music ICT.

I have read and understood the Research Information Sheet on the above project and agree to participate in the following aspects of the research project: teaching the remix topic, providing documentation, allowing observation of teaching, completing questionnaires and participating in interviews.

I understand that I may not directly benefit by taking part in this research.

I understand that while information gained in the study may be published, I will not be identified and all individual information will remain confidential.

I understand that I can withdraw from the study at any stage up until the end of the collection of data.

I understand that there will be no payment for participation in this study.

I am aware that I should retain a copy of the Research Information Sheet and Consent Form for future reference.

Signed: _____ Date_____

Please return this sheet to Antony Hubmayer as soon as possible.

Researcher - Antony Hubmayer, C/O Scotch College Adelaide, Carruth Rd., Torrens Park S.A.5062

Appendix 29: Research Participants Information and Training Session

1/03/09

Music ICT Pedagogy Research
Information and Training Session

Thank you for agreeing to participate in my Music ICT pedagogy research project. This correspondence is to invite you to attend one of the following information and training sessions. Please contact me indicating which session you will attend.

Saturday 28 March
1.00-2.00pm Procedural Information
2.00-4.00pm Audacity Software Training and Music Creation resources methodology (this session is optional for those researchers who are using an alternative software program)

Or....

Wednesday 31 March
6.00-7.00pm Procedural Information
7.00-9.00pm Audacity Software Training and Music Creation resources methodology (this session is optional for those researchers who are using an alternative software program)

If you have not already done so, please complete and return the first questionnaire. (I have attached another copy to this email.) A second questionnaire will be issued during the information and training session and this should be completed and returned before you commence delivering your music ICT lessons.

Researcher Participants (original document listed teacher names and schools)

Teacher Name	School Name
Teacher Name	School Name
Teacher Name	School Name
Teacher Name	School Name
Teacher Name	School Name
Teacher Name	School Name
Teacher Name	School Name
Teacher Name	School Name
Teacher Name	School Name

Please contact me should you have any further questions. I look forward to working with you and observing your teaching.

Regards

Antony Hubmayer
Phone (H) 83713735
(M) 0402827496
ahubmayer@scotch.sa.edu.au

Appendix 30: Research Participants Teaching and Learning Influences

Name	Teaching and Learning Influences
Michelle	Constructivism, Blooms Learning Taxonomies, rubric assessment and Gardner's Multiple Intelligences theory, meaningful musical experiences that allows them to develop technical skills and aural competencies while also developing their creativity
Brenton	Differentiated curriculum, and choices theory
John	Guided structure and scaffolding learning within authentic activities
Ryan	Behaviourism, Cognitivism and Constructivism and stated that he applied a number of these theories within a single task.
Simon	Constructivism, giving interesting tasks to motivate and enthuse learners
Susan	A range of learning theories that I was introduced to during my University studies mainly constructivism and multiple intelligences.
Trevor	Constructionism and Content Theory.
Mick	Constructivist philosophies, self-directed and individual paced learning, peer mentoring.
Tina	Learning intelligences (multiple intelligences), constructivism, student centred inquiry and the underpinning of Christian values and beliefs.
Rebecca	I like to give students the opportunity for self-direction and choice but I like to be pretty much in control of what happens in the classroom.

Appendix 31: Research Participants ICT Proficiency

Name	ICT Proficiency	Music ICT Proficiency	ICT training sessions
Michelle	Competent	Fundamental	7
Brenton	Competent	Competent	3
John	Competent	Fundamental	5
Ryan	Very Competent	Very Competent	8
Simon	Competent	Very Competent	3
Susan	Competent	Fundamental	5
Trevor	Very competent	Very competent	Numerous
Mick	Very competent	Very competent	Numerous
Tina	Competent	Fundamental	2
Rebecca	Competent	Competent	4

Appendix 32: Research Participants Regard for Music ICT

Name	Regard for Music ICT
Michelle	It's a way of engaging and motivating students in meaningful musical experiences that develop technical skills and aural competencies while also developing their creativity
Brenton	A way to support student creativity and skill development and emphasises the transference of music technology skills (audio editing) into other learning curriculums (Drama and English).
John	An important way for students to embrace new musical trends and that it should be largely student driven after some teacher direction.
Ryan	A way to engage students within all aspects of the curriculum; audio and video recording skills are taught to encourage reflective practices related to performance based subjects and oral presentations
Simon	It supports student creativity and the development of musical skills.
Susan	It enhances student learning, enabling them to be creatively self-directed and through exploration and experimentation, create the music they may not physically be able to play yet.
Trevor	Part of a balanced approach that assesses student development as well as stimulate learning interest.
Mick	A tool for exploring and developing musical literacy.
Tina	A vehicle to develop and promote musical skills and understanding; should also be transferrable to other subject areas such as Media, Drama and English.
Rebecca	Helps them explore and extend their creativity while also reinforcing aural and theory content.

Appendix 33: Research Participants Music ICT, Software and ICT Uses

Name	Music Software most valued	Music ICT uses	ICT Uses
Michelle	Sibelius, ACID music	Composing and Arranging for school,	Administrative , multimedia, preparation of worksheets/tutorials, student email, resources on school server
Brenton	Sibelius, Band in a Box, Auralia, Audacity, Sonar Home Studio.	Composing and arranging in and out of school	Administrative, PowerPoint, multimedia, preparation of worksheets/tutorials, student email, resources on school server
John	Sibelius, ACID Music, Auralia.	Composing and arranging in and out of school	Laptop in class, administrative, preparation of worksheets/tutorials, resources on school server
Ryan	Auralia, Sibelius, Adobe Audition, ACID Music	Composing and Arranging and as a semi-professional musician recording own music	Laptop in class, administrative, PowerPoint, multimedia, preparation of worksheets/tutorials, student email, resources on school server
Simon	Garage Band, Logic, Sibelius, Auralia	Composing and arranging in and out of school	Administrative, PowerPoint, multimedia, preparation of worksheets/tutorials, student email, resources on school server
Susan	ACID Music, Sibelius,	Composing and Arranging for class bands	Administrative tasks PowerPoint, multimedia, resources on school server, preparation of worksheets/tutorials
Trevor	Sibelius, Sonar Home Studio, Audacity, ACID Music	Composing and arranging in and out of school	Administrative, PowerPoint, multimedia, preparation of worksheets/tutorials, student email, resources on school server
Mick	Sibelius, Audacity, Garage Band. Cubase	Composing and Arranging for school,	Laptop in class, administrative, PowerPoint, multimedia, preparation of worksheets/tutorials, resources on school server, student email , movies
Tina	Sibelius	Multi-track recording school bands. Soundtrack for films	PowerPoint, basic desktop publishing, Email, resources on school server
Rebecca	Garage Band, Sibelius, QuickTime MusicTheory.Net	Occasionally uses Sibelius for simple arranging	Laptop in class, administrative, PowerPoint, multimedia, preparation of worksheets/tutorials, student email, resources on school server WIKI

Appendix 34: Research Participants Music ICT, Software and ICT Uses

Name	Rubrics Evaluation/Assessment	Student Peer-Mentoring	Student Peer-Assessment
Michelle	Regularly	Occasionally	Occasionally
Brenton	Occasionally	Occasionally	Occasionally
John	Regularly	Occasionally	Never
Ryan	Occasionally	Regularly	Occasionally
Simon	Regularly	Occasionally	Occasionally
Susan	Occasionally	Occasionally	Occasionally
Trevor	Regularly	Occasionally	Occasionally
Mick	Occasionally	Regularly	Never
Tina	Regularly	Regularly	Regularly
Rebecca	Occasionally	Occasionally	Occasionally

Appendix 35: Tina – Annotated Resources

Need PDF instructions in Sched Common => MP3 Music – Audacity Information

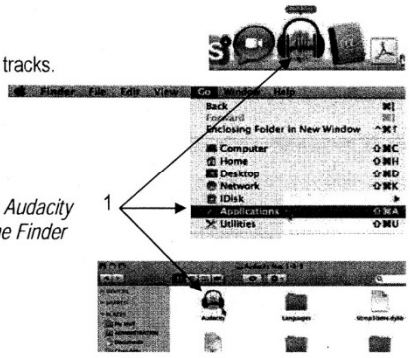
Activity 1

Music Creation Using Audacity - Activity 1

Audacity is an audio editing program that can record, playback and alter sounds and music. This activity is one of six tutorial activities designed to teach the fundamentals of audio editing in a directed and methodical approach. They are designed for individual and classroom music technology lessons. These activities work best on Audacity Mac/Win version 1-3-6. Further technical information regarding Audacity is available from http://audacity.soourceforge.net

1A Playing the Music

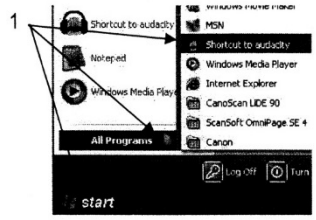
Audacity is able to play, edit and mix many different audio tracks.
There are several ways of getting sounds and music into



1. Open the Audacity Program.

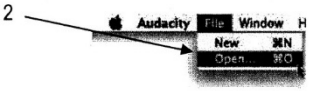
   Mac: *Move the pointer to the dock and click on the Audacity program icon. Alternatively you may need to use the Finder and locate the program in the Applications folder.*

   Win: *Move the pointer to the start button and click, then click on All Programs, then locate Audacity and click*



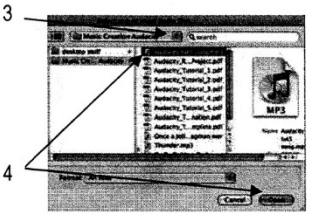
School Common. Music – Audacity Information

2. File Menu>Open.
   Move the pointer to the Audacity file menu, then select open.



3. Locate the Music Creation Audacity resource folder.
   Use the finder window navigation browser and follow your teachers directions

4. Select 'Audacity tut5 song.mp3' and click Open



5. Click Play and Listen.
   Move the pointer to the Control Toolbar and press the green play button or press the computer keyboard spacebar.

Appendix 36: Tina – Lesson Timeline

It is within this context that students can be taught and encouraged in the foundations of Music creation within Music Technology.

More information about the Audacity Lessons to be used.

Music Creation Using Audacity

These activities are designed to be a teaching and learning resource for class groups and individuals from age 12 onwards. They introduce the fundamentals of audio manipulation using Audacity. Audacity is a free, cross platform audio editor, capable of sophisticated and professional results. For a complete overview of the software please read the owners manual and visit their website http://audacity.sourceforge.net
These activities provide a context as well as a 'scaffold' that encourages further student exploration and creativity within an authentic context, using authentic tools, and achieving authentic products or outcomes.

Audacity is an audio editing program that can record, playback and alter sounds and music. This activity is one of six tutorial activities designed to teach the fundamentals of audio editing in a directed and methodical approach. They are designed for individual and classroom music technology lessons.

Overview

Week	Activity	Notes
4	Introduction to Audacity. Beginning Activity 1.	
5	Activity 1 – 2.	
6	Activity 2 – 3.	
7	Activity 3 – 4.	
8	Activity 4 – 5.	
9	Activity 4 – 5. Creation of Summative Project	
10	Summative Project – Presentation in Week2, Term 3.	I am away in Term 2, Wk 10 and Term 3, Wk1. There fore presentations will occur after my return.

Appendix 37: Trevor – Lesson Plans

Year 9 Music Technology unit lesson plan

Year 9 Music Content/Activity	Comments	Resources
Week 1		
• Set up computers • Introduce Audacity • Introduce use of Tutorials/Activities • Activity one • Check log on to PBworks site.	Also introduce PBworks site for students. Ensure all headphones, leads and computers are working.	Computers Audacity loaded Activities into Share files Headphones checked and working. PBworks site checked.
Week 2		
• Continue with Activity 1 • Introduce assessment list • Create Word File for review writing • Introduce recordings and re-mix examples.	*H/W-Ask parents what a re-mix is and post on PBworks site.* www. .pbworks.com	Computers Audacity loaded Activities into Share files Headphones checked and working. PBworks site checked.
Week 3		
• Popcorn sheet complete • Write 50 word report on word document • Begin activity 2 overview and explanation. • Students to complete assessments of any stages completed • Listen to students works • Peer sharing and listening.	Students could download Audacity or get copy from school to use on home computers. *H/w-Complete activity 2 at home (20 mins)* Pre record a class song. Up load class band songs to share/audacity folder.	Computers Audacity loaded Activities into Share files Headphones checked and working. PBworks site checked.
Week 4		
• Explain Equalisation or filtering. Natural vs simulation. • Introduce Activity 3 • Open 'countdown' • Open Band recording • Work through activity 3a-3d on band recording and 3e on countdown. • Complete as much of this activity as possible • Explore the Mp3 Concept and saving	Try to pre-record class band recordings of the group you are working with, prior to this lesson. Create a worksheet on Mpeg3 format. *H/w (create first) complete a work sheet on sound acoustics, filtering or sound, room acoustics.*	Computers Audacity loaded Activities into Share files Headphones checked and working. PBworks site checked.
Week 5		
• Discuss the Mp3 concept and a brief history. • Introduce Activity 4 • Work through the activity exercises 1a-2d • Record/review lesson in the word document • Demonstrate a mp3 vs wav file. Audio difference. • Help students understand loops and adjusting them. • Work with student needing more understanding of this stage.	Use sheet create on Mp3 history and uses. Compare mp3 to wav/pcm Use newspaper picture (microscope) vs. real picture. Explain the difference. H/W-Complete sheet. Work on tasks at home.	Computers Audacity loaded Activities into Share files Headphones checked and working. PBworks site checked.
Week 6 final week		
• Review Mp3 format briefly • Continue with Activity 4-Exercise 3-6. Record achievements and Submit work for final Summative assessment. • Write review for this lesson. • Submit all reviews (journal) for assessment with task.	Check homework Check and mark progress into teacher's diary on the stage of each student. Collate marks.	Computers Audacity loaded Activities into Share files Headphones checked and working. PBworks site checked.

Appendix 38: Ryan – Project Exemplar

For full Exemplar see DVD Appendix 51

Example Commentary:

Pre-Production :

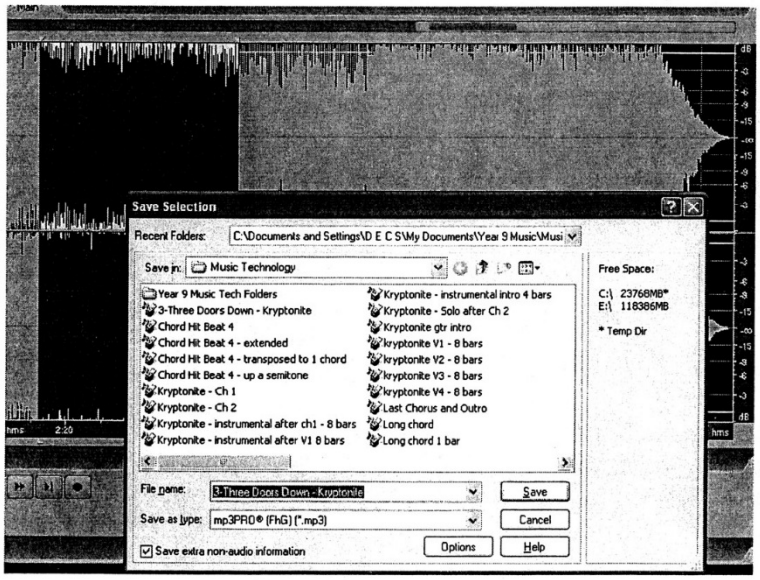
For my project I decided to create a remix arrangement of the song Kryptonite by 3 doors down.

First I transferred the music file onto my computer and then imported it into a new session of Adobe Audition 2.0.

Next I deciphered the arrangement of the song and then saved the individual sections by selecting them within the track in the edit view window, saving each selection as a separate file.

Original Form:

- Intro (Guitar solo); Intro Part 2 (Band) – 8 bars
- Verse 1 – 8 bars
- Instrumental – 4 bars
- Verse 2 – 8 bars
- Chorus – 8 bars
- Instrumental – 4 bars
- Verse 3 – 8 bars
- Chorus – 8 bars
- Guitar Solo – 12 bars
- Instrumental – 4 bars
- Verse 4 – 8 bars
- Chorus – 8 bars
- Outro – 8 bars



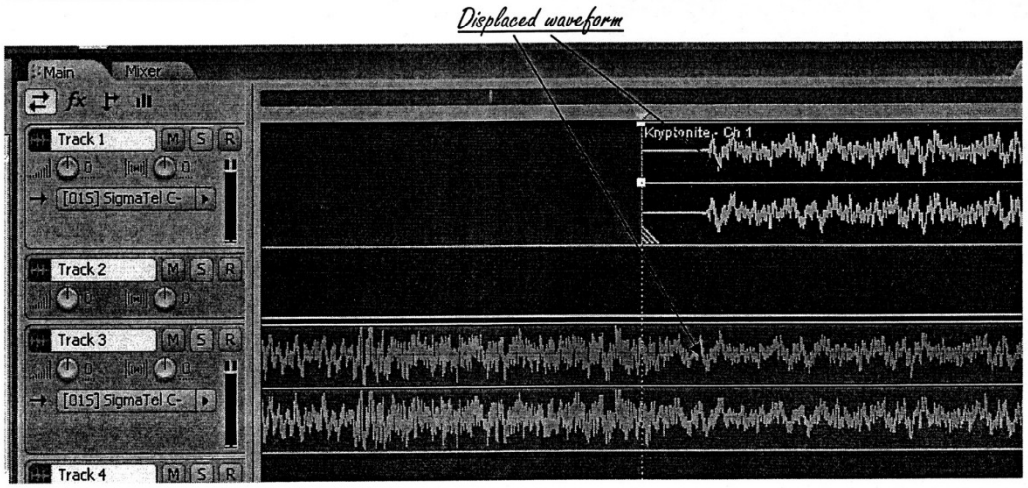
Once I had completed this I then imported each of these new files in to my session.

Mixing and Editing :

I chose the order of sections for my own arrangement and placed them out within the 'Multitrack View' window by clicking and dragging the files in to the work space. The I used the move tool to place them where I wanted.

Next I checked the transition between each section and locked in the timing of the beginning and end points.

During one of the alignments I was linking two sections which occurred in the same order from the original form. Whilst lining them up I created a comb filtering effect by displacing their alignment between 10 and 15ms. This also added to the transition between the two sections.



Appendix 39: Ryan – Lesson Plans

MUSIC TECHNOLOGY UNIT: YEAR 9 MUSIC

In this unit of work you will be experimenting with the Adobe Audition Sound Editing Software Program. As well as demonstrating skills of competency, you will be required to prepare a remix of a piece of music of your choice, mix a number of songs together or create a radio advert using at least 3 music tracks and a voice over with sound FX. You must also provide a commentary explaining your process which includes a word document and back up information from screen shots taken at various stages of your progress.

A range of skills and processes we will be covering are listed below. Tick them off as you have mastered them to ensure you complete your skills and competencies checklist.

Week 2:

Basic skills:

- Importing a file
- Selecting a waveform
- Copying a waveform
- Duplicating a waveform
- Trimming/truncating a waveform
- Splitting a waveform
- Adding/Removing Tracks
- Moving a waveform

Week 3:

Dynamics Processing:

- Amplifying a waveform
- Normalizing a waveform
- Compressing a waveform
- Adding Fade ins/Fade outs
- Adding Silence

Week 4:

Equalisation Skills:

- Using and creating a shelf EQ
- Using and creating a Bell EQ
- Using and creating a Notch Filter
- Using a Sweeping Filter
- Filtering a waveform

FX Processing: (Students must learn at least three of the following)

- Changing tempo
- Changing Pitch
- Adding Echo
- Phasing
- Reversing a waveform
- Adding Wah Wah
- Using Flanging / Chorus
- Using Delay
- Using Reverb

Students will be asked to perform a series of tasks throughout this unit. A competency checklist of tasks must be completed by the end of the unit and can be checked off at anytime from week 3 onwards:

Appendix 40: Ryan – Project Options

Assessment 1: Remix Project

For this assessment you can choose 1 of 3 options:

- Prepare a remix of a piece of music of your choice
- Mix a number of songs together musically
- Create a radio advert using at least 3 tracks and a voice over with sound FX.

You must provide a commentary explaining the various processes including a word document with back up information from screen shots taken at various stages of your project. The commentary should reflect the separate steps listed below and placed under 4 headings: *Pre Production; Mixing and Editing; Post Production; Mastering.* You should mention new skills you have developed during this project and how you used them skill to help piece together your project. Another important part of your commentary should reflect any problems that you encountered along the way and what you did to solve them.

Task Processes:

Remix of a single song or number of songs:

Step 1: Load your music files on to your server

Step 2: Create a new session in Adobe Audition and import your files

Step 3: Import your files in to the session

Step 4: Separate the sections of your song(s) with a small amount of time allowed at the beginning and end of each section. Save each selection as a separate file.

Step 5: Import these files into your session

Step 6: Create your new arrangement

Radio Advert:

Step 1: Step 1: Load your music files on to your server

Step 2: Create a new session in Adobe Audition and import your files

Step 3: Import your files in to the session

Step 4: Separate the sections of your song(s) with a small amount of time allowed at the beginning and end of each section. Remember to save each selection as a separate file.

Step 5: Import these files into your session

Step 6: Create your new arrangement: for this task you should analayse a number of music radio adverts to get ideas on how to develop your arrangement.

Step 7: Script you radio speech segments and record them in to your session.

Questions to ask yourself along the way?:

- Is the timing between sections steady?
- Doing the sections work well musically together or from one to the other?
- Are the volume levels between sections or tracks acceptable and not make it more obvious that there is a *'splicing point'*.
- If completing the radio task, do my voice overs match the volume levels of the music?
- Does my remix sound musically effective?
- Am I saving regularly?
- Have I updated my commentary for homework?
- Have I been taking a screen shot at each important stage or processes in my project?
- AM I HAVING FUN?

Appendix 41: Ryan – Assessment and Competency Checklist

ASSESSMENT CRITERIA & MARKS:

1. Remix Project:

Marks will be given to the following areas:

- Demonstration of Basic Skills: (As stated above) ____ / 15
- Understanding of FX and their application (As stated above): ____ / 15
- Arrangement analysis: (written Analysis of the songs original form) ____ / 10
- Arrangement effectiveness (How effective is the new arrangement overall): ____ / 10
- Transitions: (the timing and effectiveness of at least 5 section changes) ____ / 25
- Commentary (As stated above): ____ / 20
- Organisation of Folder/Files: (All files related to the session are kept within the same folder) ____ / 5

Total: ____ / 100

2. Competency of Skills:

Students will be asked to perform a series of tasks throughout this unit. A competency checklist of tasks must be completed by the end of the unit and can be checked off at anytime from week 3 onwards:

- **Demonstration of Basic Skills:**

☐ Importing a file ☐ Selecting a waveform ☐ Copying a waveform

☐ Duplicating a waveform ☐ Trimming/truncating a waveform ☐ Splitting a waveform

☐ Adding/Removing Tracks ☐ Moving a waveform

- **Understanding of FX and their application**

EFFECT 1: _____

☐ Opening an FX Window ☐ Choosing an effect ☐ Parameter Use

☐ Parameter Understanding ☐ Parameter effectiveness

Appendix 41: Ryan – Assessment and Competency Checklist (p.2)

EFFECT 2: _____

☐ Opening an FX Window ☐ Choosing an effect ☐ Parameter Use

☐ Parameter Understanding ☐ Parameter effectiveness

EFFECT 3: _____

☐ Opening an FX Window ☐ Choosing an effect ☐ Parameter Use

☐ Parameter Understanding ☐ Parameter effectiveness

- **Understanding of Dynamics processes and their application**

☐ Adding Compression ☐ Parameter Understanding ☐ Parameter Use

☐ Adding a Gate ☐ Parameter Understanding ☐ Parameter Use

☐ Adding Fade in/out ☐ Parameter Understanding ☐ Parameter Use

☐ Adding Silence ☐ Parameter Understanding ☐ Parameter Use

☐ Normalizing a file ☐ Parameter Understanding ☐ Parameter Use

☐ Adding Compression ☐ Parameter Understanding ☐ Parameter Use

- **Understanding of EQ and it's application**

☐ Creating a Shelf EQ ☐ Parameter Understanding

☐ Creating a Bell EQ ☐ Parameter Understanding

☐ Creating a Notch Filter ☐ Parameter Understanding

Summary Comment:

Appendix 42: Pedagogical Constructivist Depth Checklist Factors – ICT Proficiency

Music ICT Proficiency: Very Competent Teachers

Music ICT Proficiency - Very Competent Teachers	Mick	Ryan	Simon	Trevor	TOTAL (72)	%	Average Ped. Depth	Factor Difference
Deep Understanding	11	15	5	4	35	49%	28%	+21%
Surface Understanding	6	2	9	8	25	35%	45%	-10%
Not Represented	1	1	4	6	12	16%	27%	-11%

Music ICT Proficiency: Competent and Fundamental Teachers

Music ICT Proficiency Competent and Fundamental Teachers	Brenton	John	Michelle	Rebecca	Tina	Susan	TOTAL (108)	%	Average Ped. Depth	Factor Difference
Deep Understanding	3	2	1	0	10	0	16	15%	28%	-13%
Surface Understanding	10	7	11	9	6	12	55	51%	45%	+6%
Not Represented	5	9	6	9	2	6	37	34%	27%	+7%

Appendix 43: Pedagogical Constructivist Depth Checklist – Own Developed Instructional Resources

Teachers Developing Own Instructional Resources

Own Developed Instructional Resources	Mick	Ryan	Simon	Susan	TOTAL (72)	%	Average Ped. Depth	Factor Difference
Deep Understanding	11	15	5	0	31	44%	28%	+16%
Surface Understanding	6	2	9	12	29	40%	45%	-5%
Not Represented	1	1	4	6	12	16%	27%	-11%

Teachers Adapting Instructional Resources

Adapted Instructional Resources	Brenton	John	Michelle	Rebecca	Tina	Trevor	TOTAL (108)	%	Average Ped. Depth	Factor Difference
Deep Understanding	3	2	1	0	10	4	20	19%	28%	-9%
Surface Understanding	10	7	11	9	6	8	51	47%	45%	+2%
Not Represented	5	9	6	9	2	6	37	34%	27%	+7%

Appendix 44: Pedagogical Constructivist Depth Checklist Factors – Constructivist Learning Influences

Teachers Identifying Constructivist Learning Influences

Constructivist Learning Influences	Michelle	Tina	Trevor	Mick	Ryan	Simon	Susan	TOTAL (126)	%	Average Ped. Depth	Factor Difference
Deep Understanding	1	10	4	11	15	5	0	46	36%	28%	+8%
Surface Understanding	11	6	8	6	2	9	12	54	43%	45%	-2%
Not Represented	6	2	6	1	1	4	6	26	21%	27%	-6%

Teachers Not Identifying Constructivist Learning Influences

Teachers Not Identifying Constructivist Learning Influences	Brenton	John	Rebecca	TOTAL (54)	%	Average Ped. Depth	Factor Difference
Deep Understanding	3	2	0	5	9%	28%	-19%
Surface Understanding	10	7	9	26	48%	45%	+3%
Not Represented	5	9	9	23	43%	27%	+16%

Appendix 45: School of Education Comparable Creative Work Approval

Professor Tania Aspland

School of Education

Faculty of the Professions

The University of Adelaide.

Dear Professor Aspland,

I write as Principal Supervisor for Antony Hubmayer, a candidate for the D Ed degree. His topic is *The Secondary School Music Curriculum : An Investigation of Designed Learning Experiences that Promote Musical Understanding*.

Antony seeks the School of Education's permission to include the development of an ICT musical resource, as one of the three research projects required for his D Ed portfolio. This ICT Music Teaching resource would be regarded as comparable to a creative, musical or visual work being presented as part of doctoral research (see Regulation 2.4 under Specifications for Thesis, *The University of Adelaide Calendar 2013*, Adelaide Graduate Centre Section, p.40). Following this regulation, in addition to providing the ICT Music resource, Antony would be required to include an exegesis, containing

> *a description of the form and presentation of the major work and inter alia, an analytical commentary and consideration of the work in the broader framework of the Discipline. It should demonstrate mastery of the conceptual and scholarly skills associated with higher degree candidature.*

I would be grateful if you as Head of School could officially endorse this innovative approach to educational research.

Yours sincerely 14th February 2013

Margaret Secombe, Principal Supervisor

I endorse this request. _____

Professor Tania Aspland, Head, School of Education

Appendix 46: EMDCA 2009 Model

For full transcript see DVD Appendix 53

ASME XVII National Conference, Launceston July 10-14, 2009

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EMDCA: Experimentation, Modification, Deconstruction, Construction, Application - Applying constructivist learning theory to a music technology learning model.

This workshop will present a constructivist influenced Music ICT teaching model that promotes deeper student understanding through designed student enquiry.

Jackie Wiggins in her book 'Teaching for musical understanding' presents a strong argument for a constructivist approach to music education. An American study titled 'How People Learn' *Brandsford et al.* (1999) identified that the most effective learning takes place in constructive, learning-centred environments where children learn by doing and by replicating, as well as possible, 'real-world' learning problems through the use of interactive new technologies. Sheila Scott (2006) suggests that although music education may be activity-based and students are learning by doing this is often framed within teacher-centred environments that provide a 'surface approach' within an appearance of constructivist inquiry. She advocates a 'deep approach' that provides students opportunities to link new learning to previous understandings and then to interpret new knowledge through experience.

The EMDCA model draws upon the work of the above authors as well as the constructivist pedagogies of Science, Math and Media educators. EMDCA is an acronym for:

- **Experimentation** trying out general aspects of the device
- **Modification** altering through trial and error
- **Deconstruction** critically analysing preset sounds/patches (How does it work?)
- **Construction** creating your own sound/patch
- **Application** using the sound/patch in a musically creative way

The Experimentation and Modification stages are organised around Focus Activities that suggest what should be discovered but allows the learners time to explore. Peer tutoring is expected and the teachers should resist show and do demonstrations encouraging students to help each other. Student understanding is clarified through student explanation and demonstration. The Deconstruction stage follows a worked example model. Key concepts and processes are demonstrated and the student actively experiments within guided parameters. The Construction stage expects the student to demonstrate and apply the techniques learnt through the earlier stages within a similar product (patch/pattern). The Application stage is where the student demonstrates a musical use for their product. This is very open in structure. The culmination of this stage is a mix down of their work.

EMDCA Learning Model begins

Begin with a finished model of what a successful project could look and sound like. (Ideally this is an example that the teacher has created using the skills and techniques they expect the students to explore and apply.)
Resist giving too much information about the software. Encourage students to work in pairs or small groups. Set a time limit and expect students to demonstrate to the class the following focus activities.

Experimentation

Students explore the fundamental or obvious parts of the software.
Focus activities - How do you:

Loop play	Zoom in and zoom out to see the recording
Mute tracks	Make tracks louder and softer
Name tracks	Record
Make the recording play slower or faster	Delete a recording

Appendix 47: Music Experience Framework

For full transcript see DVD Appendix 54

ASME XVIII National Conference, Gold Coast July 2-5, 2011

Riding the wave of pedagogy: Designing learning experiences that deepen student understanding without drowning the learner

Antony Hubmayer, Scotch College, Adelaide

Designing Musical Learning Experiences

I have developed a framework that I have found useful for shifting my focus from being a teacher that controls and disseminates the learning content, to a teacher that designs musical learning experiences from curriculum and co-curricular focussed activities. For me, this has been a gradual paradigm shift in viewpoint; one heavily influenced by constructivist learning theories. I have come to regard all interactions with students as learning situations; whether these are formal or informal interactions, conducting co-curricular ensembles, or building understanding of curriculum content within a traditional classroom setting.

The framework begins with identifying an authentic musical activity that builds skill and knowledge development towards a specific focus or performance outcome. A general outline is provided in Table 1.

Table 1 Musical Learning Experience Framework

Authentic Activity	Purpose or specific focus
Skill Development	Practical learning with Feedback Loop
Designing Teaching Moments	Extending Prior Knowledge
Self Direction & Peer Mentoring	Creating opportunities for self-practice and focussed peer-interaction
Celebratory Performance	Authentic display of learning activity
Reflection on Learning	Identification of what they did well and what they can do better

Choral Ensemble Learning Experience

Table 2 outlines a designed Music Learning Experience that I recently conducted with my school's Concert Choir. Within this activity, the choir workshopped an original composition created by myself (Click Goes the Shears) and through a process of group feedback, the composition evolved to suit the strengths of the ensemble. In addition to this piece, a choreographed 'Glee' style performance of 'Like A Prayer' was also constructed to support the choral performance. (See references for YouTube links.) Student's participation in this choral experience was voluntary and opportunities were provided for students to influence and contribute to the learning experience through: opting in or out of the competition component, repertoire selection, suggestions for musical expression, sectional leadership during rehearsals and performance choreography.

Table 2: Choral Ensemble Learning Experience (using the Music Learning Experience Framework)

Authentic Activity	Perform two songs in a Choral Eisteddfod
Skill Development	Pitch, Diction, Tone, Expression, Rhythm, a Capella, Movement
Designing Teaching Moments	Analyse music, create question inquiry, articulations throughout rehearsal process, refer to notation (reason to read)
Self Direction & Peer Mentoring	Student sectional practise, choreographic suggestions, problem solve e.g. rhythm
Celebratory Performance	Eisteddfod and other performances
Reflection on Learning	Record/Film performance – Students comment on: what they learnt; were happy about what they could do better.

NOTE:
These appendices are included on DVD with the print copy of the thesis held in the University of Adelaide Library.

Appendix 48: DVD - Music Creation Using Audacity Resources

See DVD Disk Appendix folder 48.

Appendix 49: DVD – Mick Folio of Research Data

See DVD Disk Appendix folder 49.

Appendix 50: DVD – Research Participants Pedagogical Constructivist Depth

See DVD Disk Appendix folder 50.

Appendix 51: DVD – Ryan Project Exemplar

See DVD Disk Appendix folder 51.

Appendix 52: DVD – Boomacious

See DVD Disk Appendix folder 52.

Appendix 53: DVD – EMDCA 2009

See DVD Disk Appendix folder 53.

Appendix 54: DVD – Music Experience Framework

See DVD Disk Appendix folder 54.

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