Learning and Teaching Investment Fund 2010:

Final Project Report

The Germinate Project
RMIT Sustainable Music Industry Production Project

Key Strategic Objectives Addressed
Work-integrated learning
Multi-disciplinary project based learning

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Year in which the report was finalised 2011
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Executive summary

This LTIF project developed cross – program curriculum, courseware and technical resources necessary to establish a “flagship” collaborative learning project that allows RMIT BA (Music Industry) students to collaborate on assessment tasks and design a project that demonstrates professional/vocational practice to the Australian Music Industry.

Commencing in 2010, this project has seen RMIT BA Music Industry students from the RMIT School of Media and Communication in collaboration with two students from the RMIT School of Aerospace, Mechanical and Manufacturing Engineering work with local Melbourne industry partner Creative Environment Enterprises to design and build a mobile solar powered audio/visual production system. This design created a ‘work integrated learning project’ (named The Germinate Project) that involved undergraduate students working together to develop a design a highly efficient, audio/visual production system.

The aim of The Germinate Project has been to develop a “think green” ethos within the Australian music industry and to promote best practice in solar power generation and efficient audio technology. The Germinate Project has resulted in the construction of the RMIT owned MREG that features the latest in efficient audio amplification technology and an LED lighting. This system can power a small to medium music festival stage for musicians using standard 240v music amplification equipment. The LED lighting array uses less than a quarter of the energy usage of a single standard stage spotlight.

This project is ongoing and is taking advantage of The RMIT BA (Music Industry) undergraduate program (program code BP047) focus on achieving greater exposure and integration within the Australian Music Industry. This goal is key to maximizing the employment outcomes of the students involved in the program. This project will enhance this process by creating an opportunity for students to work along side and under the guidance of Industry professionals.

This flagship project has showcased best practice in the fields of Audio Technology, Music Marketing, and Music Performance. It aims to be an annual RMIT live music performance stage and innovative audio technology site that will be installed by RMIT students at various high profile musical festivals around Australia. This project has incorporated the theme of sustainable design as its core guiding principle. Developing innovative approaches to event production and management has been an important outcome of this project.

A key aim of this project is to establish a network of industry partners in the fields of music marketing, publicity and technical production. These partners act as mentors and collaborators for RMIT students involved in the project.

This project demonstrates the value of a flexible and collaborative approach to the design of specific major projects. Final year BA Music Industry Students enrolled in COMM2187(Major Project and Production), PERF1050 (Pathways into Music Industry Practice) and PERF 2056 (Music industry Placement) currently complete separate assessment tasks. The development of this collaborative learning project in conjunction with Industry partners better reflects the way that the learning outcomes of these courses are utilised in the music Industry.
List of outcomes:


- COMM2187 Major Project and Production courseware developed.

- Research Project Audio technology power consumption efficiency (ongoing).

- Collaboration project with School of manufacturing and Aeronautical Engineering Students.

- MOU Signed with Mushroom Music Marketing group and RMIT BA Music Industry Program

- MOU Signed with CEE and RMIT BA Music Industry Program

- Agency Agreement negotiated with CEE for ongoing Management of the Solar Sound System

- BA Music Industry graduate employment in TAC/Mushroom Marketing sponsored “Music audiences and Designated Drivers youth alcohol awareness project”.


- Showcase of Solar Sound System Technology at Folk Rhythm and Life Festival 2010.
A list of the acronyms used in the report and their meanings

BP047 RMIT BA Music Industry Program Code
LTIF Learning and teaching Initiative Fund
Kw Kilo watts
MREG Mobile Renewable Energy System
Detailed Project Description and Rationale

1. Project Description.
This LTIF project developed cross-discipline/program curriculum, courseware and resources and established a flagship collaborative learning project allowing RMIT BA (Music Industry) Students to collaborate on assessment tasks and design a project that demonstrates professional/vocational practice to the Australian Music Industry.

This project focuses on developing an RMIT student Project that showcases best practice in the fields of:

- Audio Technology,
- Music Marketing,
- Music Performance.

This project incorporates the objectives of Work-integrated learning and Multi-disciplinary project based learning and sustainable design as its core guiding principle.

A key aim of this project has been to establish a network of industry partners in the fields of music marketing, publicity and technical production. These partners will act as mentors and collaborators for RMIT students involved in the project.

This project has also created an opportunity for students enrolled in other Programs within the School of Media and Communications (and more broadly across colleges within RMIT) to participate in the project.

The aim of these projects will be to create a flagship opportunity for students enrolled in other Programs within the School of Media and Communications (and more broadly across colleges within RMIT) to participate in a high profile industry showcase of RMIT Student work.

2. Rationale

Improved student learning experiences, outcomes and employment opportunities for Students within the BA Music Industry Program.

The RMIT BA Music Industry Program has experienced rapid growth over the last two years. The program has delivered strong performance in relation to Student Survey data in spite of ongoing difficulties in finding satisfactory teaching space and resources within the city campus to accommodate the teaching and learning needs of the program.

Student survey data and SSCC reviews reveal a high degree of student satisfaction with the teaching of the program but dissatisfaction with the lack of specific learning resources for major projects. This project addresses this issue by providing a
learning project that does not require a specific teaching space and one that is sited within the Music industry and not just in the confines of the RMIT campus.

**Enhancing RMIT BA Music Industry Program Exposure within the Industry**

The RMIT BA (Music Industry) undergraduate program is focused on achieving greater exposure and integration in to the Australian Music Industry. This goal is key to maximizing the employment outcomes of the students involved in the program. This project enhances this process by creating an opportunity for students to work alongside and under the guidance of Industry professionals.

**Flexible Collaborative Learning**

This project demonstrates the value of a flexible and collaborative approach to the design of specific major projects. The development of a collaborative learning project in conjunction with Industry partners better reflects the way that the learning outcomes of these courses are utilised in the music Industry.

**Audio Technology Innovation**

The music Industry is one of the fastest evolving creative industries. A key feature of this project has been the incorporation of sustainable energy design into the technology developed. Sustainable energy design benchmarks in the field of Music Industry Event Management within the Australian Music Industry are yet to be clearly defined or established but initiatives have emerged over the last 12 months that have seen sustainable design concepts incorporated into Music industry events. For example, the ‘Earthhour 2009’ Music Event at Federation Square featured a bicycle powered music concert organised by graduates of Swinbourne Institute of Technology. In the USA, organisers of major media events such as ‘The Oscars’ Award Ceremony are demanding a “green footprint” design in the planning and production of major events. Clearly there is a strong industry demand in this area.

This project has been a response to this demand; creating a template for a cross program assessment project that results in an innovative audiovisual event production produced by students in conjunction with industry partners to be incorporated into the assessment of RMIT Music Industry undergraduate program.

By incorporating best practices in sustainable design, audio technology and product marketing, this project enables RMIT to identify itself as a market leader in the delivery of Music Industry Education.
Strong strategic alignment work Integrated Learning/Work ready graduates

This project aligns strongly with the RMIT strategic plan initiatives of Work Integrated Learning. Within the Australian Music Industry, employers have high expectations of graduates from the RMIT BA (Music Industry) program. Employers expect students to readily fit into and work well in high stress situations and be creative in addressing a wide array of work related issues and contexts.

The Australian Music Industry requires graduates who

- have the capability to communicate effectively with others,
- plan and organise their work,
- solve problems,
- work in teams
- use technology effectively.

By providing a learning opportunity sited and benchmarked within the Australian live Music Industry, this project enhances the program’s alignment with RMIT Work Integrated Learning principles.

Multidisciplinary project based learning and the provision of an enhanced positive student learning experience.

This project has established a course framework to place students under the supervision of industry partners including Audio Companies such as Johnson Audio, Factory Sound and publicity and marketing company Mushroom Marketing as well as Moreland Energy Foundation, Melbourne City Council and Inner city music venues. Students have been mentored by these industry partners while engaged in real world work tasks.
Assessment and feedback on student work has been built around a WIL template that is already in use within the BA Music Industry Course PERF2055 Music Industry Placement.

University wide application
This project has included student participation from students from other disciplines and portfolios. This project has included students enrolled in the School of Aeronautical mechanical and Manufacturing Engineering, to research the construction techniques and technology that have been used within this project.

Consultation with coordinators of Sound related courses and Programs in the School of Art, and the School of Architecture (SiAL) and the School of media and Communications (TAFE sector) have identified a need to build a community of sound technology practice across all disciplines at RMIT. This project will continue to nurture and support this community and provide additional learning opportunities for students enrolled in under-graduate, post graduate and VET programs coordinated by these disciplines.

Value for money.
This project is a pilot small-scale project that utilises the expertise of current industry professionals working as ongoing staff members and casual lecturers at the RMIT music industry program. The coordinator of this project, Dr Barry Hill is an established Music Industry professional and has a track record of developing interdisciplinary projects that connect students across disciplines. Key Industry partners such as Creative Environment Enterprises, The Boite World Music Café and Mushroom Marketing have indicated that they can support this project without cost to the University.

Financial Sustainability
The framework for collaborating with industry partners has been established and roles for stakeholders identified, this project is now a core element in the BA (Music
Industry program). While ongoing financial support for the project is not necessary for it to continue, the project would benefit from ongoing financial support from the University to increase the potential for Expanded Industry Engagement.
Outcomes and Impacts.

The project achieved multiple outcomes. These are listed below.

Note the following

- The planned production schedule was delayed by eight weeks due to the withdrawal of original Industry partner Top Shelf from industry partners.
- Even though the outcomes were delayed, they exceeded all expectations.
- Some of these outcomes involve ongoing research and teaching learning projects Some represent planned extensions. Others are an unexpected positive result of the initiation of this project.

1. **Launch of** [www.thegerminateproject.com](http://www.thegerminateproject.com) **a ongoing work Integrated learning Project for BA Music Industry Students.**
   This website is the online homepage for the project that will continued to be maintained and updated by Music Industry Students as part of the ongoing coursework design for PERF1055,COMM2187,PERF1010,1012,1014,2187,2056.

2. **Construction of RMIT owned Portable Solar Powered Sound System.**
   This system is a portable solar powered audio system that demonstrates current best practice and cutting edge technology in portable sustainable energy generation and audio visual production.
3. **Major project and production COMM2187 courseware developed.**
This final year course for BA Music Industry now features the option for students to participate in the ongoing management of the Germinate Project in a real world project for assessment for COMM2187 Major Project and Production. For example in 2011 students will be developing a sponsorship pitch for Toyota to assist in transporting the MREG system to the Northern Territory to showcase the system at an Indigenous Music festival coordinated by Australian Educational NGO Music Outback Foundation.

4. **Audio Technology Research project Audio technology power Efficiency(ongoing).**
This project has developed a ongoing research project involving BA Music Industry Staff and students in Partnership with Factory Sound Audio production Systems to find the most energy efficient audio equipment available on the market today. This project will be completed in 2011 and will result in a research publication on audio production equipment power consumption characteristics.

5. **Collaboration project with School of Aerospace, Mechanical and Manufacturing Engineering Major Project Students.**
The design of the Germinate concept development phase was aided by the involvement of two undergraduate School of Engineering students supervised by Dr Andrea Bunting.

6. **MOU Signed with Mushroom Music Marketing Group.**
After the project launch at MelMusic 2010. Mushroom Marketing executive Director Carl Gardiner contacted RMIT and discussed the possibility of a research teaching and learning industry partnership. This was formalised in the signing of an MOU agreement by RMIT and Mushroom Marketing. Current projects involve RMIT student Graduates employed to develop a marketing campaign for a TAC/Mushroom Marketing Designated Driver alcohol awareness within Music Venues.

7. **BA Music Industry Student Music audiences and Designated Driver Alcohol Student learning Study project.**
This project is ongoing and is the first collaboration project between RMIT and Mushroom Marketing. It features students from the germinate team creating a social media campaign against going to music gigs and drink driving.

8. **Agency Management Agreement negotiated with CEE.**
Industry Partners CEE constructed the MREG System and now collaborate with RMIT Music Industry Students to manage the system. This finalisation of this agreement is ongoing and has proved to be a challenging aspect of the project. This agency agreement has to negotiate the wider issue of intellectual property rights assignment and it has proved difficult to manage intellectual property within undergraduate learning and teaching projects at RMIT.

9. **Showcase of MREG Technology at Moreland Energy Foundation Event 2010.**
Moreland Energy Foundation Limited (MEFL http://www.mefl.com.au) is a not-for-profit organisation MEFL is dedicated to sustainable energy undertakes community engagement, research, consulting, train and advocate on energy efficiency, renewable energy and related policy and planning issues. The Germinate Project team provided the audio production equipment for the MEFL end of year function at
10. Showcase of MREG Technology at Melbourne Music Festival 2010
(http://melbmusic.com/Program/Pages/germinate.aspx)
Through industry connections and wide-ranging discussions with various interest
groups, the City of Melbourne acknowledged there was a need to develop an event
that became a focal point for our diverse music industry. This event was
sponsored by a range of local industry partners and provided the RMIT Germinate
Project with an opportunity for a high profile community launch of the MREG
system. This event occurred on Wednesday the 6th of October 2010 and was
despite inclement weather a fantastic success.

At Bilyana Folk Rhythm and Life Festival 2010 (FRL2010) the Germinate MREG
system powered the DJ stage for the entire festival. This event was the culmination
of the years events for the Germinate Project and enabled RMIT students to
showcase the MREG technology developed within the Project to the Australian
Music Industry.
Description of the approach and methodology used within the project.

The approach and methodology developed student skills within the framework of an individually assessed collaborative learning project.

The focus cohort of students for this project were RMIT BA (Music Industry) Students enrolled COMM2187(Major Project and Production). While this group formed the focus cohort of the project, students enrolled in other course gained the opportunity to participate in this project.

The major project assessment task within this project was to collaborate on assessment tasks and design a project that demonstrates professional/vocational practice to the Australian Music Industry.

Extract 2010 COMM2187Course Guide: This core final year course will enable you to further develop your understanding of multimedia/music production and to practice and refine conceptual, management and creative production skills acquired through prior study, in an applied manner to solve specific project requirements. In recognising that experience and networks are an essential pre-requisite for employment within the music industry,

The project required students to become decision makers, and collaborated on specific aspects of the project design marketing and implementation. Students formed small teams that reported each week to the overall group. Classes were
conducted as meetings with formal chair and minute taking roles assigned and rotated amongst the student group.

Any problems were discussed in the weekly three hour face to face sessions. These were held in RMIT computer labs initially during the research and design phase and then in meeting rooms within building 36.

The launch day of the MREG system involved RMIT students liaising with both Melbourne City Council and Mushroom Marketing as well as music venues throughout the city and students from other tertiary institutions to plan and produce MelMusic festival 2010.

MelMusic Festival showcased the work of the two highest achieving music performance students from PERF10, 1012, 1014 Performance Workshop classes. On the day, RMIT Students were interviewed by JJJ radio, Beat Magazine, Channel 31 the Weekly Review and The Age.

At the end of the semester students were required to submit a 4000 word document on their experiences within the project.

Discussion

Factors that were Critical in the Success of the Project

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<tr>
<th>Positive</th>
<th>Negative</th>
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<td>• RMIT Position in the City of Melbourne Close to Industry partners the Centre of a strong Australian Music Industry</td>
<td>• Lack of studio workspace for BA Music Industry Students within the City Campus</td>
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<td>• RMIT Brand Awareness within the Music Industry</td>
<td>• Legal Guidelines for LTIF Intellectual Property and Industry Engagement</td>
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<td>• Input of Industry partners</td>
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<td>• Extensive WIL experiences for Students</td>
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This project benefited greatly from the geographical position of RMIT both in terms of its city central location and its location in Melbourne the unofficial music capital of Australia. Melbourne is a culturally rich urban environment and has a diverse range of organizations that can support new initiatives in the field of Music and Sustainability.

The RMIT educational brand is now clearly visible in the Music Industry sector in Melbourne. Both the TAFE and HE sector Music Programs are well respected within the Industry. This facilitates engagement with local industry partners and maximises the ability of RMIT Music Industry students and graduates to establish vital networks within the Industry. It can be noted that students involved in the project are now employed with Mushroom Marketing as a direct result of this project.

The input of Industry Partners within this project has been crucial to its success. CEE played a key mentoring and design role both in the research and production phase of the technology design and construction and in the actual use of the technology with
the Music Industry. Marketing partner Mushroom Marketing played a key role in promoting the innovative nature of the Project to prospective clients within the Music Industry.

The project faced a number of challenges that negatively impacted on project management and implementation. The first of these related to the ownership of intellectual property within RMIT undergraduate research projects. Intellectual property ownership allocation between RMIT and Industry Partner CEE for the design of the MREG system within this for Learning and teaching project has proved to be difficult to negotiate. This process is ongoing and we are close to resolving IP Ownership but the process has taken over 12 months to complete.

The second main challenge has been the lack of space within RMIT city campus to both store and test the equipment constructed during the project. The BA Music Industry program has no studio accessible studio spaces to conduct the ongoing research into audio production equipment efficiency. Without this space this research project will not be able to conduct experiments in a industry standard acoustically treated environment. The project has been able to conduct tests onsite at the audio production supplier Factory Sound warehouse facility in South Melbourne. While this has been adequate it has not been an ideal environment to conduct research.

**Dissemination Strategies and Outputs**

- Web Site Launched [http://www.thegerminateproject.com](http://www.thegerminateproject.com)
- Media releases and articles. (see appendix)
- Part A and B Course Guide Amendment proposals 2011-2012
- Research Publication Wil Sustainability in the Music Industry Case Study
- MOU Mushroom Marketing
- MOU CEE (pending final approval)
- Agency Agreement CEE (pending final approval)
- Toyota Sponsorship proposal (in development)
- On going engagement with Music Industry.
RMIT BA Music Industry Linkages created by The Germinate Project.
Melbourne City Council
Mushroom Music Marketing
Boîte Café
Music Outback
Firefly Solar UK
Factory Sound
Environment Shop Melbourne
Dance Massive Festival
Bilyana Folk Rhythm festival
Michael Chugg Organisation
Day On the Green Festival Michael Gudinski Mushroom Group
\Moreland Energy Foundation
Peats Ridge Music
Evaluation of project outcomes

This project has been successful in establishing a ongoing project that will enable increased student satisfaction for this course. Course GTS Scores for 2010 reflect this improvement.

Extract media Interview with Students involved in the project.

Project Manager, (Student) Mary Mathews: “We've built something that that will make people sit up and listen ... sustainably,” she said.

"The project has taught me more about the real-world issues facing the music industry and the opportunities these present. The blinkers are off."

"Seeing the rig running a functional stage with lighting and sound was a bit surreal,” Music Industry student, Claire Lothian, said. "To watch the project go from a concept through to an operational real-world product has been an extraordinary experience.

The project has resulted in a series of Industry partnerships that will have a positive effect on the overall student experience within the BA Music Industry program and also align the program strongly with current developments within the Australian Music Industry.

The project has spawned two significant ongoing research projects into the application of sustainable design parameters within the Music Industry and also into the effectiveness of Industry Partnerships in designing WIL principles within Undergraduate Programs.

The project has initiated an interdisciplinary relationship between the RMIT School of Media and Communication and the School of Aerospace, Mechanical and Manufacturing Engineering. There is scope for ongoing cooperation between these two schools for future collaborations relating to this project.