

save to DISC: documenting innovation in music learning.
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The paper discusses an approach to determining the worth and value of innovation in music education and measuring its capacity for meaning and engagement. It also aims to identify new examples of innovation across a broad range of music learning contexts and establish a rigorous digital process for documenting, evaluating and distributing innovative cases and resources for present and future contexts. It discusses specifically a pilot project that seeks to document innovation in sound curriculum (DISC). *save to DISC* is an exploratory study in an Australasian CRC for Interaction Design (ACID) project that proposes to establish flexible and effective procedures for the sourcing, evaluating, refereeing, editing, producing, validating, storing, publishing, and distributing of a wide range of media and content types. It involves documenting innovative and successful practice in music education, creating and evaluating programs in difficult/challenging school contexts and commissioning and encouraging the production of resource materials for 21st century contexts.

Introduction

This paper explores the idea that there is a need for rigorous and accountable documentation of ‘best or successful practice’ in music and sound education that extends beyond curriculum. The latter includes developing processes for the evaluation of methods, teachers approaches, stance and value structures (Brown 2002), resources and contexts that take into account the qualities of meaning and engagement of all of these factors. It also proposes a need for documentation in multi-media form that can be used effectively as advocacy and the development of the kind of science model research concentration for postgraduate research and research collaboration. Finally, it outlines a meta-research project that provides a framework for managing, evaluating and distributing this research and resource production content.

Background

The research I am currently engaged in about music technology, classroom practice, curriculum or contemporary music, e –portfolios or inclusive music and sound philosophy is unified by the notion of what it contributes to understanding and giving access to meaning and engagement in music learning. By way of illustration let me provide a simple scenario. If a drum is placed in a room with a four-year old child it is inevitable that the child will hit the drum. The experience for the child is practically always pleasurable and this attraction to making sounds expressively and discovering its expressive qualities is meaningful and encourages further interaction. Such is human intrinsic motivation when it comes to sound and music. As a music teacher the crucial question is if that kind of motivation is not there what is ‘wrong’ with either the teaching, the curriculum or the context. In a recent article for *Music in Action* I propose that if we have to advocate on behalf of music education then perhaps we as teachers might be putting something in the way of the child and the drum and there is cause for us to analyse the relevance and meaningfulness and ability of the teaching-learning activities, methods and approaches to engage children in music making that results in real learning (Dillon 2004).

As a tertiary music educator I have noted the excellent resource structures, in-service and community idea exchanges that occur with methods such as Suzuki, Orff, Kodaly and Dalcroze. On the other hand, successful classroom programs and ideas that are personality dependent disappear with the teacher. Even excellent conceptual approaches to contemporary music making such as Paynter and Aston (Paynter and Aston 1970; Paynter 1992; Paynter 1997), Self (Self 1967) and Murray Schafer (Schafer 1976) who provided twentieth century focused resources and conceptual frameworks that could be wrought into effective classroom tools appear to have been lost or watered down to a point of obscurity. The choice between taking ‘off the shelf’, well supported and resourced methods as a basis for a sustainable music culture as against the eclectic personality dependent methods seems an obvious choice that lead inevitably to the conservative. Nevertheless on one hand there are effective and successful programs that have always occurred in schools that are not method bound, nor conservative but these are seldom documented or evaluated. Alternatively the traditional methods whilst creating strong internally consistent approaches and resources are seldom measured for their relevance to community. Observations of culturally exclusive or elitist interpretations of these methods are common but they carry with them a message that suggests we need to evaluate the appropriateness of these programs as Hartwig has done in Queensland (Hartwig 2003). We also need to document practice in those schools that are doing innovative and effective things, compare them to try to draw some conceptual framework that has transferable qualities and build a model for evaluating the meaningfulness of music education that considers the whole community. It struck me that the creation of evaluative analytical tools that are able to diagnose and prescribe the right diet and exercise plan for lifelong music education health are long overdue. So too is the need for rigorous and accountable documentation of best/effective/innovative practice in music education.

What is save to DISC?

In 1983-4 at Northwest University in the USA, Bennett Reimer and associates set up a significant research community that sought *be ‘more scientific in the way it organised its efforts, because its typically atomistic, uncoordinated studies had not yet yielded, and likely would never yield, significant knowledge about the major problems of the profession.* (Reimer and Wright 1992: vii) This research concentration resulted in CSEME the Center

for the Study of Education and Music Experience, which generated significant philosophical, organisational and practical research that focused upon solutions that were politically poignant and professionally useful. More recently Arnold April and the Chicago Arts Partnership in Education (CAPE Project) have set up sustainable arts education communities (Burnaford, April et al. 2004). Parents and politicians suggest that what is needed is evidence that music education is worthwhile and has significant transferable implications to other aspects of learning and living. This evidence needs to be compelling and easily understood and based upon rigorous and accountable research that add up to meta-arguments and like scientific research continuously seeks proof and disproof of theory through constant replication in new contexts and times. *save to DISC* proposes to construct a similar approach to research into the meaning of music but add the dimension of multi media inclusive data and method not available to Reimer in the 1980s.

save to DISC represents the ideas of saving, evaluating, recalling and *Documenting Innovation in Sound Curriculum*. The project involves documenting effective and innovative music programs in primary and secondary schools, local communities for youth and mature citizens. The focus is upon building culturally sustainable environments where expressive music making that is relevant to the local community is central. The intention is that models will be drawn from case studies and diagnostic tools for building culturally sustainable programs in diverse communities nationally and internationally will be created. These models will involve:

1. Rigorously and accountably evaluating and documenting the process across the impact areas of Art, Education, Health Business development, Social values: Community building
2. Creating a cohort of postgraduates to be music coaches and researchers and designing a research method and pedagogical model for community coach training. (save to DISC - QUT-CI- Music and sound Postgraduate studies MMus, MA PHD, and MCI, DCI, Grad Cert and Grad Dip level.)
3. Constructing a music education Meaning Indicator as a diagnostic measure of meaning, engagement and culturally sustainable in distinctive communities.

The project aims:

1. To document and evaluate effective/successful music programs.
2. Create a suite of diagnostic measurement tools for evaluating meaning and engagement outcomes in programs and software. (Note rather than being linked to 'Australian norms' as in psychometric models these tools will refer to multi media example that will increase as the diversity of cases grows.)
3. AMP'd UP: To create models of sustainable school and community music making approaches curricular and resources (system of coaches, community evaluation, diagnostic tools, business models) that will be transferable to other community contexts.
4. Create a model for educating and training community music coaches.

The infrastructure for setting up an online entity that can collect, manage, evaluate and distribute the documented research in multimedia form will be facilitated by an Australasian CRC for Interaction design (ACID) project called ACID Press. *save to DISC* has been selected as a case in a feasibility study to create a working interactive model. 'ACID Press will build a project management system that allows the processing of content as well as the reviewing and quality control of content.' (Cunningham, Bruns et al. 2004)

The linking of ACID Press and save to DISC provides a unique opportunity to generate and collect research that documents innovation and creates resources at the same time as providing frameworks for rigorous and accountable evaluation of this material alongside an opportunity for multiple modes of distribution from on demand printing to online download.

Outline of project meta-methodology

The meta-methodology utilised in these projects is commensurate with the two areas of generation of research data and the management and distribution of data/content. For the ACID Press aspect of the research that aims to observe the interaction between users, content and feed into software production.

This project [ACID Press] will employ a Software Development as Research (SoDaR) methodology which involves a process of modelling and interaction 'where understanding and learning is exposed during activities using specifically developed software and where there is concurrent cyclical development of the theories, activities, and software' (Brown 2003).

This approach allows a unique blend of action research, software development and case study that is dynamic and responsive. At the meta level ACID press will draw data that makes sense of the interaction, demands and problems generated by multi media content that comprises music education content. Further more it will generate models for evaluating multi media content or creative practice as peer refereed research. The *save to DISC* project revolves around multiple lenses on the phenomenon of culturally sustainable and meaningful music learning and teaching environments. Primarily this will be concerned

with creating a suite of music education specific analytical tools and strategies drawn from evaluation methodologies (Asher 1976; Miles and Huberman 1984; Cohen and Manion 1989; Strauss 1990; Denzin and Lincoln 2000) and based upon theories of meaning and engagement developed for real and virtual music learning environments (Brown 2003; Dillon 2003; Brown 2004 (In Press)). Furthermore, the research will employ both qualitative and quantitative strategies. In particular the production of curricular and the development of context specific resources will be included alongside creative practice as a strategy for making sense of or analysing data, as a means of presenting data and as a means of generating data itself. Much of what is done in curriculum design and implementation is itself a process of creative production. Refinement of methodology and creation of strategies for creative practice as research forms part of the postgraduate program. Another aspect of the meta study will be to collect and evaluate appropriate methodology. The most important methodological consideration is the development of the analytical tools for evaluating meaning, to which I now turn.

Developing of a range of analytical tools for meaningful music education.

For almost five years I have been testing a model of philosophy in action with undergraduate music education students at Griffith and Queensland University of Technology. The model is provided in Figure 1 below. (Dillon 2002; Dillon, Brown et al. 2003; Dillon and Nalder 2003; Dillon, Nalder et al. 2003; Dillon, Nalder et al. 2003; Nalder, Dillon et al. 2003; Dillon, Nalder et al. 2003, 30-31 August; Dillon and Nalder 2004) In simple terms, it proposes that once the problem or issue is identified an examination is made of the teaching-learning context: teacher, institutional, pedagogical, student, and community-wider community. It is necessary to examine the demands that each of these spheres of influence has upon how the teacher is able to interpret and implement music learning. Once data has been collected from these viewpoints the phenomenon/issue is examined against a set of fundamental philosophical/theoretical concepts drawn from music and arts education literature, philosophy, psychology and sociology. If the phenomenon or issue does not reflect these fundamental values then it is necessary to refer back to the context data to examine where the impediment to realising this fundamental lies. In many cases when this approach has been used, we have found that the impediment lies either in the teacher's values or in the interpretation of the teacher to impose values from institutional and pedagogical influence. For example, imposing European art music values on people whose culture is not European. This simple situational analysis tool once developed **into a set an appropriate checklist will provide a description of the location of meaningful engagement and the help identify the factors that give access to it or block it from occurring. At this point in the evaluative process we need to further identify both the kinds of engagement and the nature of meaning inherent in the context and activity?????????** In (Dillon 2001) three essential areas of meaning were identified, the personal, social and cultural.

Personal

Personal meaning in this research was defined as a communication between self and music making. Participants described the activity of making music expressively, and attentive listening to music, as evocative of a personal response, a feeling of well being and an emotive and aesthetic relationship with the music. It also promoted for them, an understanding of self as an expressive being, something that 'acquaints us with ourselves'.

Social

Students and teachers alike reported that music making provided them with a broader social contact with musicians from a variety of social contexts. They met and worked creatively with people of different genders, ages and cultural backgrounds. The relationship they described with others in ensembles was warmly outlined as a 'deeper way of knowing'. Participants described the process as getting to know other members of the ensemble through the music, through their expression, the commonality of the musical experience and the challenge of the task rather than words alone.

Cultural meaning

Cultural meaning is the most complex area of meaning explored in this research. It is a particularly powerful meaning. It is influential in the sense of self, the sense of self and others and reflects personal and community character. It is about expressiveness and the reciprocal interaction that both the artistic product and the maker have with the community. (Dillon 2001)

These areas of meaning are identifiable within a music learning context or the potential for encouraging them can be easily perceived within music resources. The methodological problem here will simply be concerned with turning these concepts into an evaluative tool and producing a range of norm-like mini documentaries as examples of each that demonstrate evidence of meaning in multi media form.

Further to this model I propose to utilise Brown's modes of creative engagement to examine the kinds of

engagement that are inherent within creative production in music learning. The implication here, is that the musician and the creative product take on different roles and different modes of engagement depending upon their experience, and relation to the task. Figure 2, illustrates the latter. The roles of: Player, Explorer, Selector, Audient and Director, describe the modes of engagement that can be adopted by the user of musical instruments and processes.

Player: describing the role of the music maker as an expressive maker of sound,

Explorer: a compositional/improvisers role where the user playfully experiments with expressive gestures and associated musical outcomes.

Selector: refers to making creative decisions about the material that the player might use in the creative process. Audient: refers to the sensory perception and analytical understanding of sound as perceived as sonic representation,

Director: refers to the control that the user has over the creative materials.

Instrument, Model, Generator, Container and Tool define the changing function of the creative idea or expressive medium/instrument in the process of creative engagement. The terms themselves are self-explanatory and we can see in this model that the role changes depending on the kind of creative process at the time. What is important here is being able to identify the modes of engagement and the emphasis upon these in ways that enable expressive control and production that is meaningful to the student and the community. (Brown 2000; Brown 2003)

These three tools provide a basis for focusing the examination of context, meaning and engagement and potentially allow a thick description of the phenomenon from a variety of perspectives. These analytical tools can be used both in conjunction with qualitative methods such as participant observation cases study (reference), Action research and grounded theory as well as quantitative methodology that can provide useful broader based statistical evidence of effectiveness and enable a meld of hard data and qualitative example in multi media form.

Further to this notion of analytical tools as suggested in Dillon (2004) there is need to consider phenomenological implications of data analysis by referring to the following principle theoretical concepts:

1. *Music is an intrinsically motivated activity (Aronoff 1969; Dewey 1989; Abbs 1990).*
2. *Activity and reflection should ideally complement and support each other. Action by itself is blind, and reflection impotent. (Csikszentmihalyi 1996:226)*
3. *Music lessons should include both making and reflective activities and be taught within a context that is real or simulated so that it is relevant to community (Swanwick 1981; Dewey 1989; Dillon 1995; Dillon 1999; Dillon 1999; Dillon 2000; Dillon 2001).*
4. *Music lessons focus upon activities that involve Composing or a creative aspect, Performing or a presentation aspect and listening/audition/ analytic response (Swanwick 1981; Swanwick 1988; Swanwick 1994; Swanwick 1999).*
5. *The musical aspects of curriculum need to consistently revisit the fundamental concepts of the elements of music and concepts of sound in time and space in increasingly deeper and more complex ways that build on understanding (Bruner 1966; Bruner 1973; Swanwick 1981; Bruner 1986; Swanwick 1988; Dewey 1989; Swanwick 1994; Swanwick 1999).*
6. *Music is a part of life and community – It needs to be integrated into school communities as a way of knowing and as a discrete and important aspect of expression within the community. (Reimer 1989; Gardner 1992; Swanwick 1999; Dillon 2000; Fiske 2000; Saatchi and Saatchi 2000)*
7. *If students gain broad general music experiences in the classroom and they also learn to be reflective and self critical about music then this skill enables them to make sense and gain access to the meaning of music wherever they find it. (Schon 1984; Fiske 2000; Saatchi and Saatchi 2000; Dillon 2001; Dillon 2001)*

8. *Music is meaningful in personal, social and cultural ways- students need access to all of these through the classroom and school environment if they are to make sense of the world they live in- a world where music plays an important role (Paynter and Aston 1970; Dewey 1989; Reimer 1989; Csikszentmihalyi 1994; Swanwick 1994; Elliott 1995; Fiske 2000; Saatchi and Saatchi 2000; Vella 2000; Dillon 2001; Dillon 2001).*
9. *There are multiple modes of engagement with music, and the exploration of these can enhance the richness of musical experiences. (Brown 2000; Dillon 2001; Dillon 2001; Brown 2003; Brown and Jenkins 2004)*

(Drawn from: Dillon, 2001, 2004)

These fundamental theoretical tenets have emerged from music and arts education literature and are generally agreed as being necessary for quality music education to occur. Referring to these as a set of phenomenon allows the robustness of each tenet to be continuously tested in practice whilst also allowing their worth to be identified and replicated in new contexts. These analytical tools and others that may necessarily emerge from sustained engagement with documenting innovation in music and sound education refer specifically to the theory of meaning that suggest meaningful music is that which is intrinsically engaging.

Meaning and music making and multi media data

According to Reimer and Wright 'While authors offer various explanations as to what constitutes musical meaning, there seems to be a general consensus that the intrinsic qualities of a piece of music (its dynamic relationships) account for its meaningfulness. (Reimer and Wright 1992)

The notions of 'dynamic relationships' and 'intrinsic qualities' are fundamental to this project. While these ideas have been discussed at length in philosophy and theory of music education as evidenced by the examples of those that are linked to the fundamental tenets outlined above, the opportunity to document these in an accessible form has not been fully utilised. Furthermore the notion that music experience might result in '*transformation of self, gaining a broadened perspective, a shift of attitude, an increase in knowledge or any of a host of other enduring alterations of a psychological nature.*' (Jackson 1998) has been observed frequently but rarely rigorously and accountably documented with clear example provided. This is perhaps why we clutch at tenuous relationships like the 'Mozart effect' because we know it exists but the evidence is neither compelling nor able to show causal links (Winner and Cooper 2000; Winner and Hetland 2000). Certainly in scholarly journals and publications we have been able to extract useful theory to apply to curriculum design such as Swanwick's concept of CLASP (Swanwick 1981) which provides a useful checklist and framework for balanced music education in classrooms. What has yet to be provided is assessed multi media example of these ideas. Increasingly in curriculum documents such as the Queensland Studies authority CD Rom (QSA reference CD) there are compelling examples of curriculum outcomes in audio visual form which when accompanied by the textual descriptions comprise more immediately understandable concepts than the text alone. Through research into eportfolio systems (Dillon, Nalder, Brown, Smith, 2003: 60) the 'processes [of multi media portfolios] have been identified and are able to provide better quality feedback and more rigorous and accountable systems for aesthetic assessment.' The potential to apply this model to research data is also poignant. It presents the opportunity to show documentaries or visual vignettes that are comprehensively assessed, demonstrate meaning and when placed amongst multiple forms of evidence that include but do not necessarily privilege text represent a potentially powerful tool for research. ACID Press will provide access to these systems of multi media document management as a means of evaluating and presenting creative practice as research alongside and woven together with 'traditional' peer refereed research data. It allows theoretical and ephemeral notions like music and meaning to be represented in identifiable multi media forms that can be simultaneously rigorously documented and evaluated and also be used in a living advocacy statement in DVD form. This will place a particular importance on the selection of cases in the initial study.

Selection of case studies

The intention is to purposively select case studies that span the primary, secondary, community youth and mature community age demographic. In the selection of cases for *save to DISC* two schools have been identified that represent difficult and diverse cultural environments that have demonstrated a significant change in their school community when an innovative and community responsive music program was implemented. Further cases will be drawn from the eminently successful *Weekend Warrior* program that operates amongst a 'baby boomer' community demographic and the *AMP'd up* program that has operated as a community music school holiday program. Each case problematises the idea of meaningful music education in unique and diverse community contexts.

Case 1: Zillmere State School: Aim High Project: The community hub project linked school and community (School-Lifeline- Brisbane City Council. The community gained a sense of achievement through involvement in a specific project (The Aim High song project). The CD was launched at a Multicultural day that also launched the long

termed community hub initiatives that employed coordinators based at the school to:

1. *Build community capacity*
2. *Improve social capital*
3. *Set up parents networks*
4. *Link new and existing programs*
5. *Access funding for progress*
6. *Establish networks of agencies*
7. *Build community spirit*
8. *Retain parents for jobs*
9. *Engage in carers' school activities*

These initiatives are undertaken with consultation with a broad network of community organisations. (Zillmere 2002)

The school demographic is diverse culturally and economically, with 30% indigenous, 20% Pacific Islander, 12% from non-English speaking background with 50% who do not speak English as a first language. Zillmere is in the lowest 10% of socio economic areas in Queensland. The project provides an excellent example of how music making has been instrumental in raising social awareness social capital and at the centre of community building. Zillmere's production of Kev Carmody's 'From little things Big things grow...' was played on 55 ABC radio stations across Australia and the project earned the school an Education Queensland's 2002 Showcase award. (Zillmere 2002)

Case 2: Glenala State High School has a culturally diverse demographic consisting of low socio-economic families from Indigenous, Islander, Polynesian, Vietnamese and European Australians. Low self esteem, motivation and attendance has been a problem for staff and students and during a recent program called *The Band Thing: Bringing New Styles* a profound change occurred in student behaviour, focus and attendance during the brief eleven week program.

The Band Thing gave an opportunity to approximately 30 students from grades 9 through 12 to participate in song writing and performance in an 11-week program that involved song writing and performance development. A final outcome objective was to create enough original material that would form a set of music to be performed at the Stylin' Up concert on Saturday 22 May 2004.

For many years The Brisbane City Council has organized a community event in Inala called Stylin' Up which showcases new & emerging R&B and Hip Hop artists both Indigenous & non-Indigenous. It encourages people of all ages and cultures from the Inala community to come together. As a part of the community focus the organizing committee wanted to give a special opportunity to students of Glenala Stage High School to be involved in the event. The Band Thing was bound to succeed as the Principal of Glenala SHS, Suzan Healy and her team, enthusiastically supported the program from its conception.

(Master of Music Project Report: Daniel Spirovski Music Coach QUT Master of Music Student)

The 'Styling up' community festival was an incredible success with large media coverage on television and newspapers and several appearances for the minister of education. Early data drawn from a questionnaire based research method did not reveal a significant outcome, perhaps because of the problem with literacy amongst families. The research also suggests the need for further attention to qualitative evidence. Subsequently Daniel Spirovski created a documentary that documented the project and drew upon theories of meaning to analyse multi media data as a research methodology that provided both evidence and advocacy material for the school community to acknowledge and document the effect of the program. The schools principal is interested in harnessing this approach and turning it into a culturally sustainable environment.

Case 3: AMP'd Up

Amp'd up is a community based music program that is being developed by Oxygen 42 and Greg Dodge in collaboration with Queensland University of Technology, the Australian Music Association and Ellaways music, Kedron Waville Service Club, Blackbeat. The program operates as a school holidays workshop for primary aged children and works on similar principles to the Weekend Warriors and Bringing New Styles in that it involves the community in structuring and providing a musical experience involving song writing, performance and recording over a two week period.

Case 4: Weekend warriors

The Weekend Warriors is a program that aims to bring old guitars and old players out of their hideaways and get them playing together in bands. It's an American idea that has been brought here by the Australian Music Association and implemented by Ellaways, a music store in Brisbane. The program has been a tear-away success and is being set up in

other music stores across the country. Five are starting programs and Ellaways are gearing up to train another ten. This is a commercially run program that achieves one of the major objectives of community music development: simply to get people playing music.
(Oxygen 42 advertisement)

The weekend warriors originated as a US franchise that focused upon mature musicians normally in the baby boomer demographic, mostly male but women and younger participants are becoming more prominent as the program is established. Oxygen42 and the AMA have implemented this program across Australia and there are coaches and programs operating in most states. The program invites participants to play in a band where instruments, technological and coaching support are provided. The bands rehearse cover versions of rock songs and then perform at a concert to friends and relatives that raises money for charity. The program has had profound success and many participants continue their involvement with the bands beyond the programs time scale, the personal, social and cultural effects of the program have been immediately apparent with a flow on effect that has clearly had transformative effects on participants lives.

All of these programs have demonstrated intrinsicity, a connection with music making and an outcome that suggests transformation of participants. Broad based evidence, critical review and evaluation of the inherent meaning and engagement is vital to support these qualitative observations. Furthermore, documentation of effects on individuals and communities and an analysis of the characteristics of coaches/teachers and community interaction that may be replicable in other contexts is also essential to create a comprehensive description of the phenomenon in practice. The abovementioned cases will constitute pilot studies for the program and will serve as models for constructing transferable and sustainable pioneer frameworks for an approach to music education in other contexts.

Developing a transferable conceptual framework

The most difficult aspect of the development of music programs is sustainability. As suggested in the introduction personality dependent programs disappear when the 'personality' leaves, whilst philosophical and pedagogical programs are sustainable but often loose relevance as the context and demographic changes. The challenge here is to develop systems that are able to be continuously evaluated and 'tweaked' to respond to changes in the community, institution, pedagogy, teaching staff and student needs. The intention of *save to DISC* is to provide a dynamic framework that is supported by continuously documented and rigorously assessed examples of the framework in a broad selection of contexts. It seeks to encourage the development and distribution of innovative resources that respond to community needs and provide a model for a postgraduate program that will feed both the community coach/teacher need and document process. Concept transferability might be secured by transferring the postgraduate cohort model to as many universities as possible both in Australia and overseas which would increase the range and diversity of cases across contexts and demographics. Sustainability within communities can requires 'building in' regular auditing and evaluative procedures that document each successive stage- a kind of regular cultural health check.

Conclusion

Whilst the vision of this project might be interpreted as grandiose, the model proposed by this paper which links ACID Press as a publishing and distribution entity for rigorous and accountable review and storage to the *save to DISC* as a postgraduate cohort and research focus is an achievable one. The project proposes to develop a working model in a twelve-month time frame. What it seeks to do is document innovative and effective music and sound education across school and local communities, create a 'brand name' program model from cases that problematise music education. It also aims to identify and organise transferable characteristics, develop analytical and evaluative tools for diagnosing and identifying both the location of meaningful experience and clearly defining its nature so that this kind of experience is accessible to all in the community. It will further provide multi media examples of meaningful music education as advocacy materials in compelling short documentary form supported by rigorous and replicated research as well as develop music education specific methodologies and strategies for analysis and data collection. The argument in this paper has mainly focused around the need for such an approach. To support this idea I have drawn from Reimer and Wright's effective CSEME model and research into music and meaning, along with research drawn from the world of music technology, which enables the scientific style modelling of musically interactive environments. From this model I have suggested an approach to evaluating the cultural health of communities utilising analytical tools such as the demand model, the location of meaning and Brown's Modes of creative engagement. It is proposed that these be developed as tools for analysis alongside qualitative and quantitative strategies to gather information about contexts and identify the dynamic relationships and impediments to intrinsically motivated music learning experiences. The importance of multi media methods as data and presentation and the use of techniques that harness the immediacy and compelling effect of such media as advocacy has been presented and the importance of rigorous and accountable documentation that provide multiple lenses on the phenomenon of music and meaning is emphasised. The purposively selected cases outlined here provide a strong indicator of the potential of these kinds of 'difficult contexts' to provide important data and potentially transferable models.

The question of cultural sustainability has been emphasised, the attachment to ACID press as an online entity that provides a place where data can be stored and managed put forward for consideration, whilst the creation of a system of

ongoing auditing processes and regular documentation procedures seeks to build in a model that is able to dynamically interact with cases over time. The development of a transferable and dynamically responsive conceptual framework will be the central focus for the cross case analysis alongside the production and development of the analytical tools. The intention is to have a working model of the online entity, alliances with funding bodies and community and industry partners and a cohort of postgraduates beginning in 2005. Once a working model is established phase two of the project will be embarked upon. It will involve developing partnerships with universities nationally and internationally. Internally over the next three years the intention is to grow the quantity of cases as the models are exported to new locations and as the research focus attracts members who participate in replication and development of the model.

About the author

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Bibliography

- Abbs, P. (1990). *Living Powers: The Arts in education*. London, The Falmer Press.
- Aronoff, F. (1969). *Music and Young Children*. New York, Rinehart and Winston.
- Asher, J. W. (1976). *Educational Research and Evaluation Methods*. Toronto, Canada, Little, Brown and Co.
- Brown, A. (2000). Modes of compositional engagement. *Australasian Computer Music Conference-Interfaces*. R. Wilding. Brisbane, Australia.
- Brown, A. (2003). Music composition and the computer: an examination of the work practices of five experienced composers. Brisbane, University of Queensland.
- Brown, A. (2003). Software development as research. *Australian Association for Research in Music Education*. R. Stevens. Brisbane, AARME.
- Brown, A. (2004 (In Press)). Software Development As Research. *British Journal of Music Education*.
- Brown, A. and G. Jenkins (2004). The interactive Dynamic Stochastic Synthesizer. *Australasian Computer Music Conference*. Wellington, New Zealand, Australasian Computer Music Association.
- Brown, I. (2002). *On Becoming a Teacher*. Melbourne, Campus Graphics.
- Bruner, J., S (1973). *Beyond the Information Given*. New York, . Norton.
- Bruner, J., S. (1966). *Towards a Theory of Instruction*. Cambridge Mass, Belknap Press of Harvard University.
- Bruner, J. S. (1986). *Actual Minds , Possible Worlds*. Cambridge Mass, Harvard University Press.
- Burnaford, G., A. April, et al. (2004). *Renaissance in the Classroom: Ats Integration and meaningful learning*. T. C. A. P. i. Education. New Jersey, Earlbaum and Associates Publishers.
- Cohen, L. and L. Manion (1989). *Research Methods in Education*. London, Routledge.
- Csikszentmihalyi, M. (1994). *Flow : The Psychology of Happiness*. New York, USA, Random Century Group: 303.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention*. New York, Harper Collins.
- Cunningham, S., A. Bruns, et al. (2004). *Project Plan: ACID Press*, Australasian CRC for Interaction Design.
- Denzin, N. K. and Y. S. Lincoln (2000). *Handbook of Qualitative Research*. London, Sage Publications Inc.
- Dewey, J. (1989). *Art as Experience*. U.S.A., Perigree Books.
- Dillon, S. (2002). Digital multi media portfolios (D-MAP) in music learning. *Closing the Loop: 2002 Evaluations and Assessment Conference*: CD Rom publication.
- Dillon, S. (2003). jam2jam-Meaningful music making with computers. *Artistic Practice as Research: 25th Annual Conference of the Australian Association for Research in Music Education*. K. H. G. Barton. Brisbane, Queensland, Australia, Australian Association for Research in Music Education (AARME): 65-77.
- Dillon, S. (2004). Documentation is the Best Form of Advocacy. *Music In Action*. **2**: 16-19.
- Dillon, S., A. Brown, et al. (2003). DMAP Research Website, QUT Creative Industries.
- Dillon, S. and G. Nalder (2003). Constructing a new conceptual framework for using digital technologies in achieving better arts assessment. *Queensland Journal of Music Education*. **1**.
- Dillon, S. and G. Nalder (2004). A preliminary research paper examining the need to construct a new conceptual framework for using digital technologies in achieving better arts assessment. *Queensland Journal of Music Education*.
- Dillon, S., G. Nalder, et al. (2003). Critical review Colloquium: Digital Media Assessment Portfolios. *DMAP Critical review Colloquium*. Brisbane Queensland, Australia.
- Dillon, S., G. Nalder, et al. (2003). Digital multi media portfolios (D-MAP) in music learning. *Artistic Practice as Research: 25th Annual Conference of the Australian Association for Research in Music Education*. K. H. G. Barton. Brisbane, Queensland Australia, Australian Association for Research in Music Education (AARME): 51-64.
- Dillon, S., G. Nalder, et al. (2003, 30-31 August). Digital multi media portfolios (D-MAP) in music learning. *Loud & Clear: Making Meaningful music in the Middle Years*. Melbourne, Australia, AMUSE: Spring Symposium of music education.

- Dillon, S. C. (1995). The student as maker: A narrative for a pragmatist aesthetic. Australian Society for Music Education (ASME X1). A. Thomas. Brisbane Australia, ASME (Queensland Chapter): 75-79.
- Dillon, S. C. (1999). The student as maker: An analysis of the meaning attached to early childhood musical encounters. The Weaver: A Forum for New Ideas in Education. <<http://www.latrobe.edu.au/www/graded/SDed3.html>>. **3**.
- Dillon, S. C. (1999). The Teacher as Builder of music learning contexts. AARE and NZARE Joint Conference Proceedings 1999. P. Jeffrey. Melbourne, Australia, AARE and NZARE Joint Conference Proceedings 1999.
- Dillon, S. C. (2000). The school as village: reintegrating art and life in a school. Primary Arts. A. Cunningham. **No.1:** 9-12.
- Dillon, S. C. (2001). Arts Education 21 C: The meaning of arts in the twenty first century and the implications of this meaning for teaching learning and research. Primary Arts. **2**.
- Dillon, S. C. (2001). Making computer music meaningful in schools. Mikropolyphonie-online journal <http://farben.latrobe.edu.au/mikropol/>. R. Wilding. Brisbane, Australia. **6**.
- Dillon, S. C. (2001). The student as maker: An examination of the meaning of music to students in a school and the ways in which we give access to meaningful music education. Institute for Education. Melbourne, La Trobe.
- Elliott, D. J. (1995). Music Matters: A New Philosophy of Music Education. New York, USA, Oxford University Press.
- Fiske, E. B. (2000). Champions of change: The impact of the arts on learning. E. B. Fiske. USA, Arts Education partnership, The presidents Committee on the Arts and the Humanities.
- Gardner, H. (1992). Arts Propel : A Handbook for Music (with video of evaluation methods and approaches). Boston USA, Harvard Project Zero.
- Hartwig, K. (2003). The Implementation of the New P-10 Arts Syllabus: Teacher's Voices. Artistic Practice as Research: 25th Annual Conference of the Australian Association for Research in Music Education. K. H. G. Barton. Brisbane, Queensland Australia, Australian Association for Research in Music Education (AARME).
- Jackson (1998). John Dewey and the Lessons of Art. New Haven and London, Yale University Press.
- Miles, M. B. and A. M. Huberman (1984). Qualitative Analsis: A Source book of new Methods. CA, USA, Sage.
- Nalder, G., S. Dillon, et al. (2003). Arts Education for a 'telematic" future. Imagine Future Possibilities: National Summit of the Australian Institute of Art Educators, Australian Institute of Art Educators.
- Paynter, J. (1992). Sound and Structure. Cambridge, Great Britain, Cambridge University Press.
- Paynter, J. (1997). The form of finality: a context for musical education. British Journal of Music Education. **Vol. 14:** : 5-21.
- Paynter, J. and P. Aston (1970). Sounds and Silence: Classroom projects in creative music. Cambridge, Cambridge University Press.
- Reimer, B. (1989). A Philosophy of Music Education. USA, Simon and Schuster: 252.
- Reimer, B. and J. E. Wright, (Editors) (1992). On the Nature of Musical Experience. USA, University Press of Colarado.
- Saatchi and Saatchi (2000). Australians and the Arts. Australia, Australia Council.
- Schafer, M. (1976). Creative Music Education: A handbook for modern music teachers. New York, Schirmer Books.
- Schon, D. (1984). The Reflective Practitioner. New York, USA, Basic Books, Harper Colophon.
- Self, G. (1967). New sounds in the Classroom: A practical approach to the understanding of performing of contemporary music. London, Universal Ediition.
- Strauss, A. L. (1990). Qualitative Analysis For Social Scientists. New York, USA, Cambridge University Press.
- Swanwick, K. (1981). A Basis For Music education. London, NFER- Nelson Publishing Co. Ltd.
- Swanwick, K. (1988). Music, Mind and Education. London, Routledge.
- Swanwick, K. (1994). Musical Knowledge: Intuition, Analysis and Music Education. London, Routledge.
- Swanwick, K. (1999). Teaching Music Musically. London, Routledge.
- Vella, R. (2000). Musical Environments: A manual for Listening, improvising and composing. NSW, Australia, Currency Press.
- Winner, E. and M. Cooper (2000). Mute those claims: No Evidence (Yet) for a Causal Link between Arts Study and Academic Achievement. The Journal of Aesthetic Education. **34:** 11-75.
- Winner, E. and L. Hetland (2000). The Arts in Education: Evaluating the Evidence for a Causal Link. Journal of Aesthetic Education. **34:** 3-10.
- Zillmere (2002). Aim High: From Little things Big things Grow... Brisbane, Zillmere State School.

Figure 1

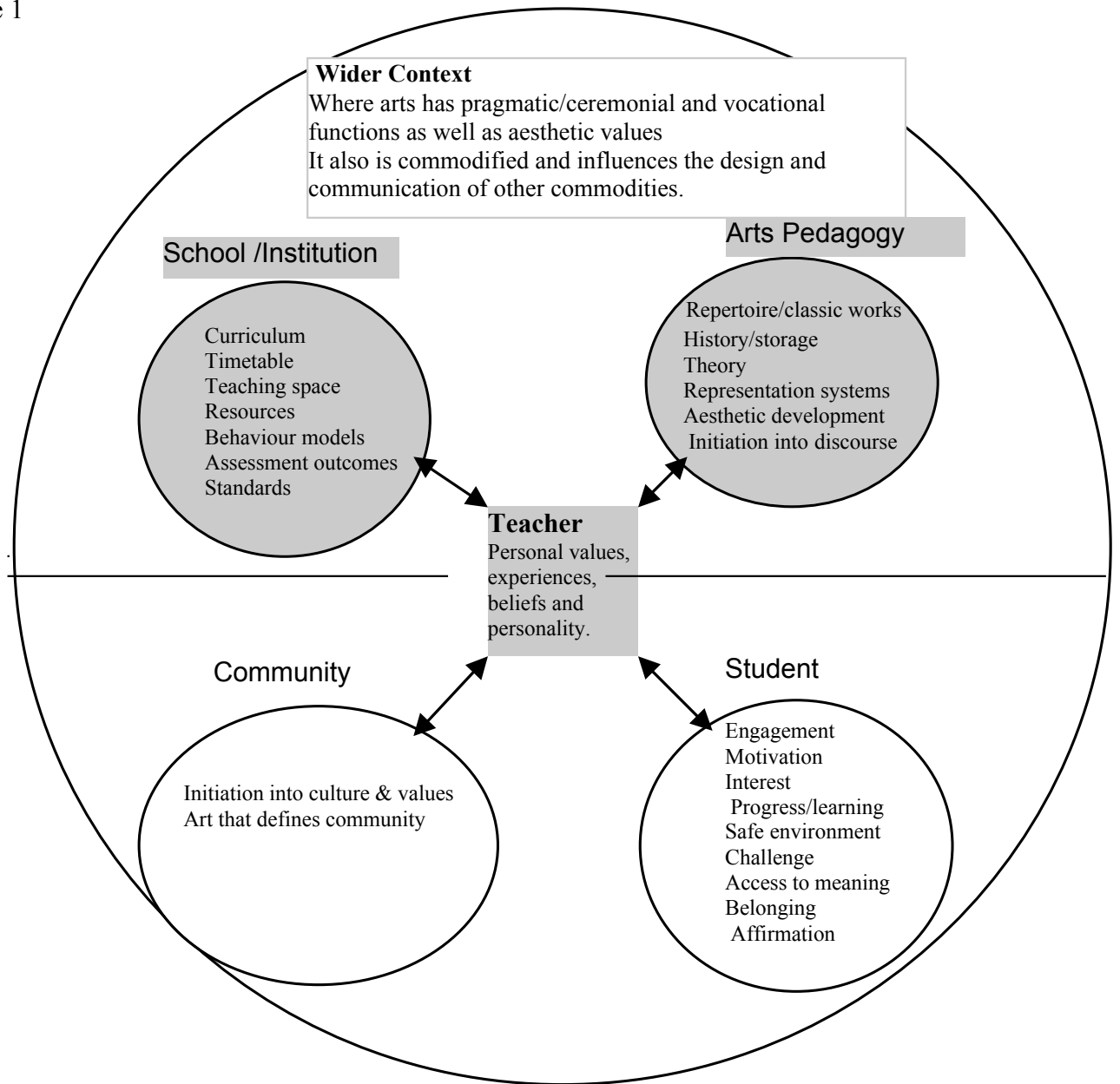


Figure 2

