

Assessing the positive influence of music activities in community development programs

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This article describes a framework for assessing the positive influence of music activities in community development programs. It examines hybrid music, health and rich media approaches to creative case study with the purpose of developing more compelling evidence based advocacy that examines the claims of a causal link. This preliminary study examines the problems with the research methods and seeks to design a more media inclusive approach that allows music experience to be heard in more compelling ways than text alone. The framework outlined in this paper provides a measure of effectiveness for community development programs that integrates social and cultural aspects. The framework connects notions of resilience as a fundamental building block for healthy communities with indicators of musical meaning and engagement. These indicators have previously been used individually in evaluating the effectiveness of music experience. This article reports on an exploratory research project that utilises this framework across a series of case studies in several culturally diverse Australian communities. The relevance of the research is that it seeks to identify the critical components of music education that have significant transferable implications for community development programs.

Introduction

There are many examples and anecdotes about the transformative qualities of music and its benefits to health and wellbeing. However, a meta-study published in the *Journal of Aesthetic Education* suggests that there is not yet sufficient evidence for a causal link between music experience and health (Winner & Cooper, 2000; Winner & Hetland, 2000). Professor Don Stewart, a World Health Organisation consultant on resilience in schools, further acknowledges that links between music making and health, wellbeing and resilience have not been researched in ways that are as compelling as the anecdotes we hear about these connections (Dillon *et al.*, 2004; Lemerle & Donald Stewart, 2004a,b). Whilst these studies do not deny the existence of critical literature and research about the effects of music on cognitive and social development, it does raise questions about the quality, depth and connectedness of

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these studies. Whilst I am aware of the significant research in the area of community music making, music therapy and cultural theory (see e.g. the literature review at: <http://www.prs.co.uk/powerofmusicreport/>), this research may not connect with research into community health and health promotion.

The purpose of this paper is to examine the development of a framework for analysis of cultural health in a way that is rigorous and accountable, and enables the quality of music experience to be heard and seen. Three creative case studies are described that exemplify positive influences of music in communities and schools. It is proposed that from these cases we can identify the critical components of music education that have significant transferable implications for community development programs. The discussion outlines an approach to evaluation of active music making contexts. This approach utilises situational analysis and theories of meaning and engagement to describe the relationships, obstacles, and supporting and enabling factors that affect the cultural health of a community. The framework outlined in this paper provides a measure of effectiveness of these community development programs. It integrates the social and cultural aspect, and connects notions of resilience as a fundamental building block for healthy communities with indicators of musical meaning and engagement. In this article, I will outline how each case study employs these methodologies and evaluates active music making in context. Combining this methodology and literature we may begin to identify the critical components of music education that have significant transferable implications for community development programs. The fundamental purpose of these studies is to examine ways of capturing the essence of music experience in compelling ways that utilise hybrid music and health methodologies and emerging rich media technology to allow music making to be heard rather than silenced in textual description.

Background and context

This preliminary research focuses upon active music making in three settings in Brisbane, Australia, in a primary school, a high school and a community school holiday program. The unifying aspect of the contexts was that they were community driven projects. The expressive qualities of the music making were drawn from the participants' interests and passions and developed by community music 'coaches' from Indigenous Australian and Polynesian communities. What brought these ideas to our attention was a project called 'Aim High' which was located at a small primary school. The school was cited as a significant case study in Queensland University of Technology's Centre for Health Research study of resilience in communities and Health Promoting Schools (HSP) projects (Lemerle & Donald Stewart, 2004a,b). The researchers in this study defined resilience in their submission to the UN Secretary-General's Commission of Inquiry into Child Violence as 'the ability to survive and thrive despite exposure to negative circumstances (Hollister-Wagner *et al.*, 2001)'. The most widely quoted definitions are Masten's (1994) definition of resilience as 'a pattern over time, characterised by good eventual adaptation despite

developmental risk, acute stressors, or chronic adversities' and Gordon's (1995) extended definition that integrates the multiple levels of resilience-enhancing interventions with the many adverse circumstances to which one may be exposed: 'Resilience is the ability to thrive, mature, and increase competence in the face of adverse circumstances' (Lemerle & Donald Stewart, 2004a,b). The model of community intervention used in this research is termed a salutogenic (Antonovsky, 1996) based on strengths rather than deficits alone (Landrigan *et al.*, 2004). It is the reverse of a pathogenic model of health that focuses exclusively on deficits or weaknesses to be corrected, and is built around fostering and sustaining assets or 'capital' within individuals and social structures.

However, Lemerle and Stewart's research did not acknowledge the positive influence of music activities in the community's development, nor investigate the role of cultural capital in the development of resilience. An opportunity for an interdisciplinary research partnership brought these connections to our attention. What follows describes three exploratory case studies where personal or community transformation has been observed and resulted in improved resilience as defined by the Lemerle and Stewart study. We have used these studies to design hybrid and context-appropriate methodology. The data from these approaches will be used to create models for music making, evaluate cultural capital and document the positive benefits that build upon the success of the case studies. These cases are compared so that we can identify the common characteristics of communities that provide access to meaningful and engaging music making, and that can be described as a positive influence on the community. Through examining these cases and those of a further study, we will be able to describe how we might examine the cultural health of a community and provide models for making practice more effective. Within the exploratory study, I propose three analytical frameworks that provide a basis for developing tools for analysis and models for creating meaningful and engaging music making programs to be tested in a larger scale study in 2006.

A framework for analysis of cultural health

In 2004, we began a research project called save to DISC (Dillon, 2004c), which proposed to document innovation in a sound/music curriculum. The project began with a cohort of postgraduate research students and a series of research grant applications and partnerships with the music industry and local government. The aim was to create socially responsive expressive music making programs in 'difficult' contexts and document the processes so that transferable models might be constructed. Furthermore, we resolved to use data gathering strategies that we felt were more able to capture the essence of music experience and identify meaning and engagement in participants. Within this process, the three pilot case studies were identified. These studies provided an opportunity to develop an approach to music making that drew upon culturally inclusive methods. We also chose to examine approaches to methodology that focus on evaluation through capturing compelling

artefacts of experience in digitised form combined with explanation, rather than evaluation through explanation alone. What is outlined in these studies provides an approach to the development of analytical tools and a methodology that allows the media of music making to be presented and documented more effectively.

Case studies

The following is a description of three case studies that constituted both short- and long-term projects:

Aim High

Zillmere State School is a culturally diverse school that has a significantly high proportion of Indigenous and South Sea Islander families. A large proportion of its population are socially and economically disadvantaged with literacy and numeracy levels amongst the lowest in Queensland. In collaboration with Lifeline (a community aid organisation), Queensland University of Technology Centre for Public Health Research and Brisbane City Council the school instituted a community hub project. The project used a song written by Indigenous singer songwriter Kev Carmody and Paul Kelly as a basis for students to write new 'personal' songlines and made a recording and video. The song 'From little things big things grow' and the communities' involvement with producing this song unified and gave a social identity to the school and its community. The song was played on 55 radio stations across Australia and is still played some four years later. The school was awarded 'school of excellence' status in 2002 by the state education authority. The music teacher and her 'choir' present frequently at education conferences and international events, and the school music program featured as an exemplar in the recent national review of music education (Pascoe *et al.*, 2005). Whilst the schools success cannot be entirely attributed to the song project the effect on community resilience was clearly indicated by the tests administered by the research team. What was even more interesting for our research was the effect of the media as a means of communicating the concepts of resilience and the clear connections to meaning inherent in the video. The powerful imagery of unity, cultural diversity, happiness and community pride presented a succinct summary of the project that had considerable political and social impact (see video example: <http://dmap.ci.qut.edu.au/Spin/STDHome.htm>). The explanation of the project's research significance has had significant impact in health research (Lemerle & Donald Stewart, 2004a,b) but the video provides a powerful and compelling advocacy statement for the program.

The role of song and 'songlines' in Australian Indigenous communities is an important consideration. Songlines when presented with a particular relationship to time, place and people are able to reference important knowledge in Indigenous communities (Ellis, 1985). Kev Carmody's 'From little things big things grow' provided a basis for the urban children to create their own songlines that were

particular to their community, their place in it and their relationship to others. Whilst the use of song to create cultural identity is not new, the syncretic creation of songs (Vella, 2000) to build new identities is less common than a song used to 'colonise' those who sing it. This is an important consideration where the community is culturally diverse, and where the music we make is based upon a 'colonial' paradigm rooted in European art music, whilst the rich and diverse musical culture often inherent with multi-cultural communities is ignored. This kind of 'cultural blindness' is particularly noticeable in many Australian schools' relationships with South Sea Islander communities where a rich culture of part-singing and dance is apparent in daily lives and church yet their participation in school programs is often non-existent. This phenomenon was particularly evident in our second case study school in a suburban high school.

The band thing: Bringing New Styles

Bringing New Styles was an 11-week project at a state high school which has a similar demographic to Zillmere. The focus of the project was to improve attendance and engagement with the school community. It involved a relationship with the music industry through Oxygen42, a market enhancer; an instrument retail association, the Australian Music Association (AMA); Queensland University of Technology, Music and Sound, and the high school. The project involved employing 'music coaches' drawn from the local Indigenous and Islander communities. The coaches and music teacher facilitated a project involving the students in composing and performing songs in a 'new style'. The project was supported by the donation of instruments by the AMA and funding for coaches through the district council. It culminated in a performance at a community festival for youth called 'Styling up', a recording and a video. Subsequent performances were held at Brisbane, Queen St Mall in the centre of the city and for the state minister of education.

A report on the success of the project was commissioned by the AMA to examine the effects using a questionnaire instrument (Baker, 2004). This instrument provided some interesting but cautious results. The results did not seem to match the anecdotal observations of coaches and teachers of increased students' attendance and concentration in school. The music teachers at the school suggested when interviewed that the low return rate of the questionnaire was perhaps due to the low literacy of families and cultural unfamiliarity with questionnaire instruments. Whilst the appropriateness of the instrument to the context was perhaps questionable, when this data was combined with audiovisual evidence collected by a participant observer the evidence of transformation of the participants was more noticeable. Whilst the short length of the project influenced the observation of significant effects, the artefacts of meaningful experience in video and audio form showed a potential to provide compelling evidence and example of the positive and transformative effects of musical experience. The impact of the performance and recording was sufficient to attract the attention of the minister of education and the media. The flow on effect

enabled a whole new program to be funded for the following year. The next case study builds on these ideas in the development of the program. More significantly, providing access to personal, social and cultural meanings was applied more consciously to curriculum design as well as learner and teacher relationships.

Amp'd Up

Amp'd Up was a two-week school holiday program for 8–14-year-olds utilising a similar model to that used in the BNS project and with several of the same coaches and participants. The project has had three consecutive seasons and each time students have gained in their musical understanding. The program involves students learning 'cover versions' of popular songs often on unfamiliar instruments. Participants are shown how to compose their own songs and later perform them to friends and family at a public venue. With this project QUT Master of Music researcher Daniel Spirovski utilised an analytical framework that examined personal, social and cultural meaning (Dillon, 2004b) to synthesise evidence of transformation. He examined the effects of the program and compared it with data collected from the BNS project. His report (Spirovski, 2004) examined 'stories of transformation' in the above-mentioned programs, linking each 'story' to multimedia evidence. Spirovski's approach employed a participant observation case study methodology using multiple data forms drawn from interviews, press articles, audio recordings of students' songs and performances, e-mails and reflections; and includes the music therapist's questionnaire report. What was unique about the approach was the use of a multimedia data matrix to connect and theorise about the data. This matrix will be described in more detail later in this paper. Using this media data, Spirovski was able to create short documentaries that summarised the projects and provided succinct and compelling advocacy statements. This approach builds on an approach to using digital portfolios as means of storing, theorising, assessing media data in a dynamic database (e.g. Dillon & Brown, 2006).

Drawing out commonalities

Each of these cases approached music making in a culturally responsive way and employed members of the community to work with the students to make new music. This process has been extremely successful for the Chicago Arts Partnership in Education CAPE project (Burnaford *et al.*, 2004). The scope of the projects is also expanded through the involvement of local music retailers and district councils. This expanded the opportunity for students to receive acknowledgement, affirmation and a sense of belonging from their own community. The partnerships, performances and recordings provided a vehicle for reciprocal interaction with the community and built cultural capital and meaning. What has been critical in the success of these programs has been the attention to the distinctiveness of the community and the kinds of music that the participants value as expressive. Whilst 'cover versions' of

popular songs formed the basis of music learning early in the process, it was recognised that there was more value in creating new styles that were not rooted in particular cultural or sub-cultural values. The diversity of the BNS recordings provides powerful evidence of the personal and social meaning gained from the projects alongside the musical knowledge demonstrated by participants. Three factors inform the construction of a framework for a successful program:

- i. An attention to the distinctiveness of the context;
- ii. Attention to the modes of creative engagement;
- iii. An examination of whether these clearly lead to personal, social and cultural meaning for the participants.

The methodology that evolved over the three case studies involves participant observation case study and other non-participant ethnographic strategies. It utilises digital means of data capture and organisation using digital portfolio systems. Analysis and theory can be undertaken and constructed calling upon viewing and reviewing multimedia evidence. This approach allows the experience of arts making to remain in its symbolic form: music as music, and performance as performance, rather than solely as an abstract textual explanation. I would argue that this approach to creative case study provides a domain specific and media appropriate means of examining music experiences and the relationships to distinctive social and contextual conditions.

Constructing a framework for analysis

The examination of cultural health using analytical tools has been explored recently in development of methodology for designing software using theories of meaning and examining students interaction with it in a dynamic way (Dillon, 2003, 2005a; Brown, in press). These projects suggested that we could examine music making in context and adjust the framework to encourage meaningful and engaging interaction with music making. The approach involves:

- i. Examining the context and relationships within a community/system that promote or disable engagement with creative production using a model for situational analysis (Dillon, 2003);
- ii. Applying tools that identify and describe modes of creative engagement (Brown, 2000);
- iii. Identifying the location and type of meaning experienced by students (Dillon, 2004c).

Examining the context

Examining the context involves observing and documenting aspects of the physical and cultural environment such as:

- Institutional practices including: timetable, teaching spaces, behaviour models and resources;
- Music pedagogical practices: repertoire, history, theory, representation, and aesthetic development;
- Community values and cultural practices.

These need to be documented to examine how they influence the access students and teachers have to meaningful and engaging music making experience. We need to determine the flexibility and openness to change of these aspects. The music teacher's values, experiences and beliefs need to be considered to determine how they influence the interpretation of curriculum and the context. Most importantly in a student centred environment it is essential to understand the students' values, interests and learning styles in the construction of engaging music experiences. To further understand the cultural health of a community we need to develop appropriate programs to respond to the distinctiveness of the environment. Situational analysis has been utilised successfully in the HPS approach, which arose from the World Health Organization's Global School Health Initiative (1995). Whilst this approach is well established in health research such a health-based approach has not been used before to investigate expressive community music making. This concept offers important opportunities for developing a new awareness of the links between music making and vibrant, sustainable communities.

The HPS framework analysis entails a comprehensive approach to curriculum development, establishment of wide-ranging partnerships between the school and broader community, and systematic approaches to promoting a health-focused school ethos and environment. Evaluations of the HPS model consistently demonstrate effectiveness in providing schools with a set of principles to integrate strategies delivering a comprehensive, 'whole-school' organisational approach with positive outcomes for children's health. In addition, recent evidence from Australia confirms that the HPS model builds social and organisational capital within the school setting, creating a work environment that promotes teachers' health (Lemerle & Stewart, 2004b). These approaches to contextual analysis ensure that music making becomes woven into the cultural fabric of the community. What needs to be further developed is the creation of a checklist that enables clear and concise snapshots of the context and how it can be interpreted for cultural health.

Modes of creative engagement

Once an understanding about the context has been established, we need to examine the modes of interaction that occur within the learning and teaching relationships. Brown's research of composers' interaction with technology suggests that there are particular roles that musicians take on when they engage with creative activity (Brown, 2003a). These 'modes of creative engagement' are helpful when constructing a learning environment. In creative and collaborative production, we often fail to understand the mode of engagement. What may be perceived as unstructured free

play may not recognise an ‘exploratory’ mode of engagement. What is needed is a way of recognising the mode and modelling approaches to learning and teaching that facilitate effective relationships with the creative process. Whilst other models examining a student’s engagement with music making in context exist (e.g. Lamont, 2002), Brown’s model has been drawn from a long-term analysis of contemporary professional composers and presents a model of engagement that has been validated further in a range of research projects with ages ranging from 4 to 18. It has presented a consistently clear description of the process of engagement (Brown, 2000, 2003a,b, in press; Dillon, 2003, 2004a, 2005a).

In Brown’s model (Figure 1), each mode of creative engagement describes the role of the creative music maker and the purpose of the tools of production. These may be physical technologies such as computers, acoustic instruments or creative technologies such as compositional or theoretical processes. In this research, the model functions as an evaluative tool to observe and describe the ways in which students interact with creative processes. This information can suggest the most productive approach and tool for interaction and provide structure and understanding to the music making experience.

Examining meaning and engagement

In a number of recent studies, I have examined the meaning of music to students and the ways in which we can provide access to meaningful and expressive music making (Dillon, 1995a,b, 1999, 2001a,b, 2004b, 2005a). I have argued that examining meaning involves identifying it in personal, social and cultural locations and relationships. I suggested that for a program to be sustainable students need consistent access to experiencing meaning in all three ways. A range of data collection strategies can be used to record the presence and level of each of these meanings and connect them with the contextual aspects that encourage or impede them and the modes of creative engagement that facilitate the experience. This theory was employed effectively as an analytical tool by (Spirovski, 2004) when he created a ‘transformation matrix’. This matrix consisted of a web page displaying a list of media data that was linked to video

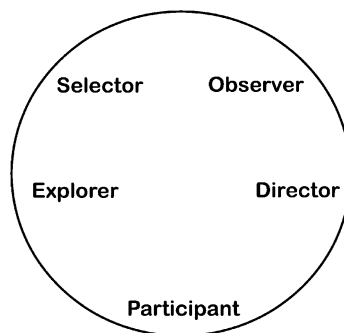


Figure 1. Brown’s modes of creative engagement

interviews, newspaper articles and students' recordings. Spirovski was able to identify connections between each aspect of meaning and determine whether there was evidence present within each artefact. Against each item he was able to tabulate whether or not the aspects of theory was present in the data from each of the case studies (see e.g. <http://dmap.ci.qut.edu.au/Spin/evidence.htm>). From this evidence he created stories of transformation that display digitised examples of meaning in context (<http://dmap.ci.qut.edu.au/Spin/hotarticle.htm>). These analytical tools provide a way of examining theory in action in a dynamic process of observation, description and implementation of changes in approach and culture. What Spirovski's data suggests is that these contexts show evidence of access to meaningful and engaging music making. Furthermore, they also indicate that using rich media provides compelling musical examples of evidence rather than textualised abstractions or explanations alone. If we then consider the addition of recognised health measures for examining social function we should then move to further facilitate rigorous and accountable connections between meaning and engagement in context.

Examining social function

In addition to the development of music centric analytical tools for determining cultural health it is proposed that the long term study should utilise the SF-12 Health Survey (Ware *et al.*, 2000, 2005) which is a 12-item Short-Form Health Survey incorporating a construction of scales and preliminary tests of reliability and validity. This brief but comprehensive instrument provides an 'all-round' measure of health. SF-12 is constructed on the basis of empirical studies linking each questionnaire item to a comprehensive 'pool' of widely used questionnaire items proven to measure the same health concept. It yields a comparable 12-dimension health profile and comparable estimates of summary scores for the physical and mental components of health. It has been translated and linguistically validated for use in more than 30 countries and languages. The addition of this relatively simple but broadly validated measure allows a connection to the holistic experiences of the student within the wider context of community. It allows us the opportunity to distinguish what transformative effects are likely to be attributed to other social factors rather than music experience. It is critical to discern whether growth or learning might have occurred by means other than musical experience. In prior research, I have noted that students' self-reporting on their musical or social growth was seen to be one of these ideas that generated more robust theory when data was evident from a variety of sources. Winner and Cooper (2000) suggest that this is a noticeable flaw in music and health research where a correlation is used to argue that playing the piano improves mathematical skills rather than examining the argument for a causal link that might suggest simply that students who are good at mathematics might be attracted to playing piano. SF-12 and HPS's framework provide us with useful tools for documenting the positive benefits of music making. It is hoped that employing these diverse data sources and music/health hybrid strategies should enable us to build upon the current understanding about the

characteristics of effective programs. They should assist us in determining the nature of transferable qualities and understand those qualities that are context specific.

Identifying the critical components of music education that have significant transferable implications for community development programs

The following qualities of cultural health were identified in schools and community development programs that demonstrate personal, social and cultural transformation and resilience.

The music program:

- Focuses upon increasing expressiveness and understanding about how human culture express themselves in sound. Makes consciousness more complex through access to creative practice;
- Promotes self-motivated and autotelic behaviour;
- Is open to genre, time, culture and style as an opportunity for expanding our knowledge of expressive music making;
- Is culturally inclusive;
- Interacts dynamically with community;
- Exhibits a productive relationship between analytical and intuitive musical knowledge and seeks to integrate experience through reflective practice;
- Utilises authentic/appropriate assessment.

These characteristics summarise the characteristics evident within the case studies discussed in this paper, and informed the approach of constructing the curriculum models and values of the teachers and community coaches. It is around these tenets that we need to collect evidence that will create a thick description (Lincoln & Guba, 1985) of the relationships between music and health, and evidence of a causal link. These data might evolve into a checklist for cultural health that is connected with skills, techniques and processes for implementation of these kinds of values in a dynamic and culturally inclusive way. These characteristics emerged from a study of music education theory and philosophy (Dillon, 2001b) and were tested in a small number of Australian and US case studies. They present an opportunity to allow philosophy to interact dynamically with practice and to grow in its relationship to a broad range of fresh contexts. The main study proposes to apply these tenets and analytical tools to a range of community music making contexts, focusing upon recreational music making for health and wellbeing as a lifelong pursuit.

Conclusion

The key findings of this exploratory research have been that:

- i. The cases examined shared qualities of meaning and engagement that are identifiable;

- ii. Digital media asset portfolio systems and creative case study methods are effective in music education research.

Further research should aim to:

- i. Identify the critical components of music education that have significant transferable implications for community development programs;
- ii. Develop a framework for assessing the positive influence of music activities in community development programs;
- iii. Create a structure for documenting and analysing evidence of a connection between cultural health and social;
- iv. Examine connections between notions of resilience as a fundamental building block for healthy communities with indicators of musical meaning and engagement.

In this paper, I propose the use of a suite of analytical tools for evaluating the cultural health of a music making community that will be developed into a cultural function checklist. I have provided an overview of three creative projects that generated curriculum models and digital methodology for a proposed large-scale documentation and development research project. These ideas have been drawn together with literature study to describe common qualities that lead to resilience and a sustainable framework for cultural health in schools and communities. Furthermore, I have begun outlining a digital media portfolio approach to methodology, analysis and presentation that makes the act of music making more present and compelling within each aspect of the research process than textual description allows. All of these are dynamic and evolving theories that have the potential to grow as new cases are added and compared, documented and evaluated utilising these techniques. The implication for practice is that this approach to research has the potential to provide a continuous stream of compelling evidence for the connection of active music making with social health and wellbeing. Furthermore, the project will develop media inclusive research methodologies that capture and amplify the experience of music rather than silence it and relegate it to ephemeral description.

Notes on contributor

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Current research projects with the Australasian CRC for interaction Design (ACID) include digital document management systems and virtual learning environments as well as Networked Improvisational Musical Environments (NIME). He is the director of the save to DISC research network that focuses upon documenting innovation in sound curriculum (DISC).

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