The web, music-making and higher education

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Over the last decade or so the Internet has served to enable the global practice of social networking. 'Web 2.0' is now used to describe a participatory culture which is transforming value systems, undermining notions of authority and power, and enabling new pathways for autonomous creativity and innovation in music-making.

The idea of a record industry once suggested a Fordist-like production chain of musicians, sound engineers, promoters, A&R managers and record companies. Now in the 21st century such workflow is increasingly devolved to independent artists creating with portable digital production systems and ICTs. The traditional audience/artist divide blurs, where 'prod-users' (Lessig, 2001) become actively engaged in the creative process in ways that allow amateur and professionals alike to coexist and enjoy the shared experience of creating art. Broadband networks have become a platform to host virtual, asynchronous composition and performance (Duckworth, 2005).

In the Wake of the Dot-com Bubble

Throughout the preceding decade there have been a number of evolutionary features worth noting. Social networks shared, remixed and ranked media, they swapped music files and hacked into systems where this was not allowed. Big media cartels went into denial, refusing to accept this evolution was occurring. In Hollywood and in the music industry the cry was that 'piracy is a crime', and that under no circumstances were corporate copyright owners to be undermined. This was perhaps a somewhat hypocritical perspective when powerful companies aggressively funded political change and legal restrictions - many had built their own empires on appropriation and 'standing on the shoulders of giants', for example, in the case of Disney, by reworking traditional Hansel and Gretel stories into cinema feature cartoons (Lessig, 2004).

The underlying corporate themes have been the same: 'How can we control this? How can we upgrade the industry to 'version 2' in order to continue to enjoy the profits made in the past?' While the music industry has represented one of the most centralised and well developed systems of publication, in recent times the world has witnessed shifts of global significance led by the file-sharing of MP3 music recordings deemed illegal because corporations demand recording and marketing investment returns through official sales outlets. Nonetheless, contracted artists do not usually own their recorded work, where 70 years plus the life of the author is the *de facto* term for company claims to artists' copyright.

Unsurprisingly perhaps, major artists are now rejecting these arrangements. For example, the UK's Guardian reports that Prince recently drew ire from Sony-BMG who declared that he'd now be known as 'the artist who formerly sold in record stores' (Allen, 2007), following his controversial decision to give away his latest album for free, bundled with the UK's Mail on Sunday newspaper. Prince subsequently went home to the US with a reported US\$30 million from 20 London concerts promoted through the giveaway, while Sony refused to distribute his album. The Australian (Sherwin, 2007) noted that Radiohead released their new album online with a donation value to be decided by their audiences (average US\$9), while also offering a limited edition and quickly sold-out box-set in UK stores at £40. Elsewhere, Nine Inch Nails and Trent Reznor (Goldmeier, 2007) are among the musicians raising the notion that the Internet may offer them a better deal than the labels, which they accuse of restricting artistic direction and income through unfair contracts.

Beyond Stardom or Bust

Pulitzer prize winner Thomas Friedman (2005) characterises the Internet workplace as 'one where hierarchies are being flattened and value is created less within vertical silos, but more through horizontal collaboration' (p. 15). Similarly, Chris Anderson (2006) argues the case for how products that are in low demand or have low sales volume can collectively make up a market share that rivals or exceeds the relatively few current best sellers and blockbusters.

Meanwhile, in young bands a transdisciplinarity is increasingly pervasive, where members might include not only highly trained instrumental and voice specialists, but also video artists (VJs), cyber-artists, webmasters and lawyers - often sharing multiple roles. They are aware of the 2.0 landscape, success oriented, and understand their IP rights regarding contractual terms, territory and returns. This includes opportunities as varied as site-specific performance and installations, synchronisation, advertising, ring tones and other work across hybrid or niche musical genres. Such ensembles draw attention to their work through Internet-based viral marketing, blogs, videos, and free recordings. Download activity may be tracked, then tours subsequently arranged in active areas of The face-to-face relationship audiences is enhanced through social networking and the Fordist ethos of old is replaced by that of the independent digital artist, where the creative project becomes the new business model:

"A work structure based on temporary workers mainly involved in projects . . exchanged in the market through networks of creativity, not simply driven by the will to achieve a better position in the employment ladder or social status, but by the objective to increase personal reputation and get in touch with always more interesting projects and team working opportunities." (Frederiksen & Sedita, 2005, p. 28)

It is clear that label-free artists can in fact make a living. Music-making is not somehow polarised between 'stardom or bust', and next generation practitioners are taking advantage of careful planning and collaboration where value is created through independent networks which allow for eclectic tastes, new audiences and a breakdown of former cultural, territorial or stylistic barriers.

However, it may be that contemporary education and musical training cannot easily keep pace with such contextual developments for art and craft.

Conservatoriums at University

Somewhat cautiously, Gabriel Jacobs (2005) produced some well-argued research in a recent education technology journal, questioning the benefits of hypermedia and so-called 'discovery learning'. In this she says:

"The aim of educating students such that they can transfer learning to unfamiliar problems and situations is not . . achieved by giving them their reins before they have learned to walk safely. Hypermedia technology, for all its great potential . . is a dangerous weapon in the hands of the inexpert" (p. 7).

University of Georgia's Tom Reeves (1995) adds:

"Although there are many advocates of discovery-based environments for the learning of social studies, science, and even mathematics in schools, most of these people would probably prefer their brain surgeons to be trained via direct instruction." (p. 6).

It would be fair to say that conservatoriums have indeed maintained a strong tradition of direct instruction. Craft and technique reign supreme, but what is questioned here is the changing professional context and the possibly outmoded nature of the learning environment which may limit the discovery of new applications for the skills.

An increasingly corporate-like 'one size fits all' higher education environment has had a heavy impact on music training in general. However, musical activities often necessarily incorporate risk taking, creativity and innovation to drive original compositions, performances, public engagement and media-based works. Authentic practice follows the natural ebbs and flows of intensive event cycles and new audience outreach, but do not necessarily assimilate well within standardised approaches to higher education. It is useful to recall that the merging of arts institutions with universities is a relatively recent Australian formation, borrowed

from Thatcher's England. Some commentators agree that the results have been less than satisfactory, as Ross Fitzgerald notes:

"Australia has a history of adopting failed overseas educational ideas, it followed suit . . although arts institutions are not solely academic, the solution . . has been to treat them as academic and place them into university structures . . In creative areas there are no right answers but a whole range of choices . . requir[ing] very particular pedagogy . . studio teaching focuses on a close interaction between practising artist-teachers and students, inspired by an aesthetic philosophy of 'thinking through making'". (2007, para. 7)

From the Dawkins reforms of the 1990s to more recent Australian Federal imperatives, university ideology has been consumed by massification, a so-called 'client-focus' and a preoccupation with branding. Institutions have sought to control web sites as marketing and information delivery tools, while commercial e-learning systems format-shift, scale and distribute pedagogical models to compartmentalise artists' educational opportunities. Degree programs are segmented into semesterised courses both online and off, by school-like timetables, lectures and tutorial groupings.

Consequently, university students are often separated from the rest of the cohort and the ambiance of social and intellectual communities. Complex tensions remain amid the demands of conformity, attitudes about artistic standards and career destinations, collaboration and participation, and the evolving needs and often naive conceptions of Gen Y student musicians.

Participatory Culture and Higher Education

The term 'participatory culture' was coined by Henry Jenkins, Professor of Literature at MIT and Director of their Comparative Media Studies Program. In his report for the US MacArthur Foundation (2006) he speaks of the need to rework the nature of 21st-century education based on changed global contexts and opportunities enabled by social networking. That is, to provide:

- relatively low barriers to artistic expression and civic engagement;
- strong support for creating and sharing one's creations with others;
- some type of informal mentorship whereby what is known by the most experienced is passed along to novices;
- a culture where members believe that their contributions matter;
- an environment where members feel some degree of social connection with one another and care what other people think about what they have created.

Jenkins's MIT research team asserts that access to participatory culture functions as a 'new form of the hidden curriculum' (ibid, p. 3) shaping just which graduates will succeed, and which will

be unable to integrate within the new knowledge economies.

In summary, the key skills drawn from this embedding of social networking tools and culture within education should include:

Table 1: Key 21st century skills

Appropriation	the ability to meaningfully sample and remix media content
Collective Intelligence	the ability to pool knowledge and compare notes with others toward a common goal
Distributed Cognition	the ability to interact meaningfully with tools that expand mental capacities
Judgment	the ability to evaluate the reliability and credibility of different information sources
Multitasking	the ability to scan one's environment and shift focus as needed to salient details
Negotiation	the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms
Networking	the ability to search for, synthesise, and disseminate information
Performance	the ability to adopt alternative identities for the purpose of improvisation and discovery
Play	the capacity to experiment with one's surroundings as a form of problem-solving
Transmedia Navigation	the ability to follow the flow of stories and information across multiple modalities
Simulation	the ability to interpret and construct dynamic models of real-world processes

Just as the corporate sector buys up web 2.0 applications and are restructuring accordingly, so too are universities now cautiously examining the social networking phenomenon and beginning to incorporate a range of blended learning strategies (Bersin 2004) to try to better engage so-called Gen Y 'digital natives' (Prensky, 2001), who increasingly create, rank and collaborate in the online world.

Concluding Remarks

In a speech to a major youth forum in China, Vivian Reding (EU Commission, Information Society and Media) spoke about the post-dot com bubble landscape as essentially connected to the development of culture, value, production, education and future knowledge economies:

"A new paradigm in which users are coproducers: of content (blog, wiki, Flickr), of taste/emotion (Amazon, de.li.cious), of goods (eBay), of contacts (MySpace), of relevance (Google pagerank), of reputation/feedback (eBay, TripAdvisor), of storage/server capacity (Peer-2-Peer), of connectivity (wifi sharing, networks) or of intelligence (business web2.0)." (2006, para. 6).

The higher education sector now increasingly attracts many students eager to learn, create and prosper through such familiar technologies. In Australia, Edith Cowan's West Australian Academy of the Performing Arts (WAAPA), Griffith University, Queensland University of Technology (QUT), the Royal Melbourne Institute of Technology (RMIT), University of Melbourne's Victorian College of the Arts and Music (VCAM) and others continue to attract and graduate significant numbers of artists, and according to DEST statistics steadily growing at the rate of some 2–3% per year.

Meanwhile, an online participatory culture is transforming value systems and creating new pathways for autonomous innovation. In the web 2.0 phenomenon, social networks continue to define the information society and in turn, redefine artistic career opportunities quite different to traditional training preconceptions of a former era.

Yet in music education, although the romanticised 70s styled, star-driven model is in the process of significant transformation, classroom practice reveals that many students maintain outmoded ideas of just what career musicians do and how they make a living. Inexperience, together with the folklore of the trade magazines and mass media continue to assert this. Similarly, faculty staff and administrators may remain decades out of touch with contemporary, perhaps puzzling practices:

"Our schools are still focused on generating autonomous learners; to seek information from others is classified as cheating. Yet, in our adult lives, we are depending more on others to provide information we cannot process ourselves. Our workplaces have become more collaborative; our political process has become more decentered; we are living more and more within knowledge cultures based on collective intelligence. Our schools are not teaching what it means to live and work in such knowledge communities, but popular culture may be doing so" (Jenkins, 2006, p. 129).

University-based music faculties rightly argue to be places of higher learning: art for art's sake, not necessarily connected to commercial outcomes, but rather, to promote creativity and excellence in craft. Still, neither can music educators afford to ignore the fact that many students desire vocational success and to be able work rewardingly as professional artists.

Responsive training does not mean a shift away from core skills; it does however, speak directly to the imperative to acknowledge authentic contexts for artistic and intellectual craft. Graduate success will continue to demand high calibre artistry, but also fluid abilities and the technological imagination

with which to respond to transformed, music 2.0 opportunities.

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References:

Allen, K. (2007). Music industry attacks Sunday newspaper's free Prince CD. Guardian Unlimited, 29 June. Retrieved 18 Oct. 2009, from http://business.guardian.co.uk/story/0,,2114557,00.html Anderson, C. (2006). The long tail: Why the future of business is selling less of more. New York: Hyperion. Bersin, J. (2004). The blended learning handbook: Best

practices, proven methodologies, and lessons learned. San Francisco, CA: Pfeiffer Wiley.

Duckworth, W. (2005). Virtual music: How the web got wired for sound. New York: Routledge.

Fitzgerald, R. (2007). National art school fighting a war of independence. *The Australian, Opinion,* 27 November. Retrieved 17 Sept. 2009, from http://theaustralian.news.com.au/story/0,20867,2082533 9-7583,00.html

Frederiksen, L. & Sedita, S. R. (2005). Embodied knowledge transfer: Comparing inter-firm labor mobility in the music industry and manufacturing industries. *DRUID Working Papers 05–14*, 2005. Copenhagen Business School, Dept. Industrial Economics and Strategy: Aalborg University. Retrieved 25 June 2009, from http://ideas.repec.org/p/aal/abbswp/05-14.html

Friedman, T. (2005). The world is flat: A brief history of the twenty-first century. New York: Farrar, Straus & Giroux.

Goldmeier, J. (2007). Trent Reznor, Nine Inch Nails go free." *Paste Magazine*, 9 October. Retrieved 18 Oct. 2009, from

http://www.pastemagazine.com/action/article/5440/news/music

Jacobs, G. (2005). Hypermedia and discovery based learning: What value?" *Australasian Journal of Educational Technology*, 21, (3), 355–366.

Jenkins, H. (2007). Confronting the challenges of participatory culture: Media education for the 21st century. An occasional paper on digital media and learning. Chicago, III.: The MacArthur Foundation. Retrieved 22 October 2009, from http://newmedialiteracies.org

Lanham, R. A. (2006). *The economics of attention: Style and substance in the age of information.* Chicago: The University of Chicago Press.

Lessig, L. (2004). Free culture: How big media uses technology and the law to lock down culture and control creativity. New York: Penguin Press.

Lessig, L. (2001). The future of ideas: The fate of the commons in a connected world. New York: Random House.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, NCB University Press, Vol. 9 (5), October. Retrieved 2 July, 2009, from http://www.marcprensky.com/writing

Reding, V. (2006). The disruptive force of Web 2.0: How the new generation will define the future. *Speech presented at the Youth Forum, ITU Telecom World,* Hong Kong, China, 3 Dec. 2006. Retrieved 16 June 2009, from http://europa.eu/rapid/pressReleasesAction.do?reference = SPEECH/06/773&format

Reeves, T. (2005). Evaluating what really matters in computer-based education. Georgia: University of Georgia. Retrieved 27 September 2009, from http://www.educationau.edu.au/jahia/Jahia/pid/179

Sherwin A. (2007). Name your price for Radiohead album. *The Australian*, 2 October. Retrieved 25 June 2009,

http://www.theaustralian.news.com.au/story/0,25197,225 18839-16947,00.html

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