

Impact Case Study (Ref 3b)

<p>Institution: Leeds Metropolitan University. School of Film, Music and Performing Arts.</p>
<p>Unit of Assessment: Unit 35 Music, Drama, Dance and Performing Arts</p>
<p>Title of case study: Game Audio Research and Curriculum impact</p>
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>The research of Richard Stevens and Dave Raybould has had significant worldwide impact on the curricula for, and teaching of, audio for video games. The research conducted by, and under the stewardship of, Stevens by the IASIG's education working group defines the scope of this new discipline and outlines the syllabi required to meet the needs of the economically powerful computer games industry. Based upon this framework, and including additional research into specific creative and technical practices, Stevens and Raybould's book 'The Game Audio Tutorial' (Focal Press) has become a core text for both game audio and game design programmes.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>Between 2009-2011 Stevens chaired the Education Working Group of the IASIG. The Interactive Audio Special Interest Group (IASIG) was formed in 1994 under the auspices of the MIDI Manufacturers association as a forum for industry professionals to exchange ideas about improving the state of the art in interactive audio and has been influential in the development of audio standards, features, and APIs for desktop and mobile platforms. In this role Stevens coordinated and undertook research to meet the growing demands from industry for an appropriately qualified workforce. This research involved a quantitative analysis of job roles posted during the survey period, formal surveys of industry professionals, category rating exercises, a job role mapping exercise (using custom software built by Raybould), a review of existing literature in the field, and expert interview. This is described in Collins et al, 2011. As part of the research Stevens also took part in an industry / academic panel discussion at the AES 127th Convention in New York (Game Audio Education in three parts) before chairing a similar panel at AES 128th Convention in London (A curriculum for Game Audio, including Raybould as a contributing panel member). The resulting document ("Game Audio Curriculum Guidelines" published by the MIDI Manufacturers association on 1st March 2011) articulates some of the research undertaken and this is further elaborated on, together with a reflection of the process in the journal paper "Designing and international curriculum for game audio".</p> <p>Simultaneous research undertaken by Raybould into the creative and technical implementation practices of game sound and music is combined with the IASIG curriculum within the 'The Game Audio Tutorial' (Focal Press), the first textbook in the discipline. As well as synthesising and communicating existing practice in a new way, (the book is accompanied by a unique interactive game level for learning), Stevens and Raybould also suggest new conceptual models for the design and use of music in games.</p>
<p>3. References to the research (indicative maximum of six references)</p> <p>Stevens et al. (2011) <i>Game Audio Curriculum Guidelines</i>. Interactive Audio Special Interest Group. MIDI Manufacturers Association, La Habra, U.S.A. (Industry body publication, no ISBN available). Available from http://www.iasig.org/wg/eduwg/index.shtml</p> <p>Collins, K., Onen, U., Stevens R. (2011). <i>Designing an International Curriculum Guideline for Game Audio: Problems and Solutions</i>. Journal of Game Design and</p>

Development Education. Year 2011. Volume 01.
ISSN 2160-9691 (Print) ISSN 2160-9705 (Online)

Stevens, R. & Raybould, D. (2011) *The Game Audio Tutorial: A Practical Guide to Sound and Music for Interactive Games*. Focal Press. ISBN-10: 0240817265. ISBN-13: 978-0240817262

Raybould, D., Stevens, R. (2010) Audio Engineering Society 128th Convention. A *Curriculum for Game Audio* [Panel Chair]. May 24. London

Stevens, R. (2009) Audio Engineering Society 127th Convention. Education in Game Audio in Three Parts. Panel Discussion. 9th October. New York.

4. Details of the impact (indicative maximum 750 words)

The impact of the research is demonstrated through the widespread adoption of the IASIG *Game Audio Curriculum Guidelines* as an internationally recognised framework, and the use of *The Game Audio Tutorial* as a core text in many HE institutions worldwide. The Interactive Audio Special Interest Group of the MIDI Manufacturers Association's authority and reputation in the field has led to widespread adoption of the to the guidelines document (downloaded 3755 times to date since its launch at the Game developers Conference, San Francisco, 1st March 2011). The global impact of the curriculum research can be seen directly in the development of courses such as Video Game Scoring (UG FS371, Masters FS615, Berklee College of Music, Boston), Composing for Games (MPATE-GE.2128, NYU Steinhardt, New York), Sound for Games (MUS195, MUS617 Academy of Art University, San Francisco), and the new provision emerging in places such as the University of Cape Town, South Africa. A specific case study of the impact of the guidelines on curriculum development at the Art Institute of Austin, Texas can be found in Sarinsky's AES journal paper "*Integrating 'Audio for Games' Into the Modern Audio Production Curriculum.*" Since 2012 the guidelines also inform the accreditation of courses in the UK via the Skillset accredited body JAMES. In addition to its impact of curricula and syllabi the guidelines are also impacting on professional development, "We are using the guidelines in developing the official FMOD learning suite as well as the other educational material we create." Stephan Schutze (FMod is a widely adopted audio middleware solution in industry).

The main 'users' of the research are of course academics so it is unsurprising that we reference supporting comments from authoritative figures in the field such as Karen Collins ("Stevens and Raybould ... present the reader with an excellent introduction to the concepts of interactive game sound... this book is sure to find a home in many classrooms and homes of aspiring sound designers, composers, and audio programmers." (Focal Press Review) but it is important to also acknowledge that many institutions, particularly in the USA, value the contribution of industry professionals to their courses and so the adoption of the *Game Audio Tutorial* as a textbook in these instances further supports the case for its quality and relevance. Gary Miranda uses the book to teach at The Recording Arts Centre, San Diego, but is a composer and sound designer working for Sony Online Entertainment, the Advanced Interactive Audio course at Full Sail University based around the book has the award winning composer (Game Audio Network Guild awards, 2011), Dan Reynolds as leader. Other industry professionals such as Ben Minto, (part of the BAFTA award winning team behind the game Battlefield 3 (DICE, 2012)) report that it is "a very good book – already recommended it to folk starting out and people who run Video Game courses.", Scott Selfon (Senior development lead in Microsoft's advanced technology group) recommended the book during his presentation at GDC (2011) and Michael Kelly, Vice-Chair of the Audio Engineering Society Technical

council, and Chair of the AES Audio for Games conference described it as being, "An excellent hands-on introduction to game audio. I'd recommend it to anyone starting in the area."

The game audio tutorial has also been widely recognised by the industry not only for students wishing to enter the profession, but also as a vehicle for professional development. The Game Audio Podcast says that there is "no finer way to start off your education in this area", and Game Developer Magazine names the book as one of the top five resources for learning game audio (January, 2013) and in his review for Music, Sound and the Moving Image journal (2011) the composer Marios Aristopolous states, "...the level of technical detail of the practical exercises and techniques is impressive and is not evident in any other books of this field, making it an ideal read for game audio students and designers.", and many independent readers have commented on the books application in their personal development (Amazon reviews).

The Game Audio Tutorial has sold 1500 copies to date but the number is perhaps not representative of its impact) given that the accompanying tutorial level was downloaded 2941 times in the first twelve months alone (the discrepancy is probably due to significant piracy of electronic copies of the book). Its wider impact can perhaps be indicated by the fact that the search term "Game Audio" (www.google.com 15.11.12) reveals the website for the book as the second result from 2,480,000.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- **Amazon.com**

Reviews of the book from people seeking professional / personal development
<http://www.amazon.com/The-Game-Audio-Tutorial-Interactive/dp/0240817265/>

- **Game Audio Podcast #11**

Source of industry quotes regarding *The Game Audio Tutorial*.
04.09.2011. <http://www.gameaudiopodcast.com/?p=290>

- **Game developer Magazine "Hot for Game Audio"**

The Game Audio Tutorial named as one of the top five resources for the discipline.
Kastbauer, D. January 2013, Volume 20, Number 01.

- **JAMES**

Joint Audio Media Education Support
<http://www.jamesonline.org.uk/>

- **Music, Sound, and the Moving Image**

Review of The Game Audio Tutorial
Volume 5, Number 2. Autumn 2011 by Marios Aristopolous p197
1753-0768 (Print), 1753-0776 (Online)

- Sarisky, M.J. (2011) Integrating 'Audio for Games' Into the Modern Audio Production Curriculum. In: **Audio Engineering Society Conference: 41st International Conference: Audio for Games**. Available from: <<http://www.aes.org/e-lib/browse.cfm?elib=15766>>.

- Schutz, S. *FMOD learning Suite* informed by IASIG curricula

<http://www.soundlibrarian.com/fmod-suite.html>

- **Selfon, S. (Microsoft)**

Recommendation regarding The Game Audio Tutorial Made during Game Developers Conference presentation. <http://www.gdcvault.com/play/1014317/Audio-Boot>
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