Literacy in the digital world of the twenty first century: students, curriculum, pedagogy, games and play.

Catherine Beavis  
Griffith University  
School of Education and Professional Studies  
Gold Coast, Australia 4222  
+61 7 55528267  
c.beavis@griffith.edu.au

Clare Bradford  
Deakin University  
School of Communication and Creative Arts  
Burwood, Australia 3125  
+61 3 92446487  
clare.bradford@deakin.edu.au

Joanne O’Mara  
Deakin University  
School of Education  
Burwood, Australia 3125  
+61 3 92446783  
jomara@deakin.edu.au

Christopher Walsh  
The Open University  
Faculty of Education and Language Studies  
Milton Keynes MK7 6AA UK  
+61 8 81137809  
Christopher.Walsh@open.ac.uk

Tom Apperley  
University of New South Wales  
School of the Arts and Media  
Sydney, Australia 2052  
+61 2 93858534  
t.apperley@unsw.edu.au

Amanda Gutierrez  
Australian Catholic University  
Faculty of Education and Arts  
Fitzroy, Australia 3065  
+61 3 99533616  
amanda.gutierrez@acu.edu.au
ABSTRACT
This paper reports on a three year Australian Research Council project in six Australian secondary schools: Literacy in the Digital Age of the Twenty First Century: Learning from Computer Games. The project had three foci: games as cultural artefacts, new forms of narrative and multimodal contemporary textual forms; young people’s knowledge of, and engagement with, the world of digital games and what might be learnt from that to support the learning of new and traditional literacies; and teachers and curriculum change. Drawing on classroom case studies and other data, it presents an overview of key findings, outcomes, and recommendations.

Keywords
Digital Games, literacy, digital literacy, games-based learning.

INTRODUCTION
The capacity and potential of digital games to engage students, foster a range of multimodal literacy learning and literacy practices, create contexts for collaborative and problem solving approaches through the generation of affinity groups, and provide complex learning environments and deep learning, have been widely argued and recognised (Gee 2007, Schaffer Squire Halverson and Gee 2005, de Castell and Jensen 2003, Chee 2011). Internationally, research reviews have mapped a wide range of curriculum interventions organised around games, particularly in relation to learning in curriculum areas (Perrotta, Featherstone, Aston & Houghton, 2013; Young et al. 2012). However, to date there has been little Australian research reported in this area. This paper reports on findings from a three year Australian Research Council project in Australian secondary schools on games-based learning, with a particular focus on literacy and learning: Literacy in the Digital Age of the Twenty First Century: Learning from Computer Games. The project had three foci: (i) video and other forms of digital games as cultural artefacts, new forms of narrative and multimodal contemporary textual forms; (ii) young people’s knowledge of, and engagement with, the world of digital games and what might be learnt from that knowledge and engagement to support the learning of new and traditional literacies in school and (iii) teachers and curriculum change: the challenges and opportunities teachers faced in reconceptualising the curriculum subject English to encompass digital games, to support the learning of new and traditional literacies. The paper discusses key elements emerging from the study – shifting constructions of school subjects and subject boundaries brought about by the incorporation of games into the classroom, the value of paratexts in curriculum design, classroom pedagogy and students’ out of school lives, the importance of gaming capital (Consalvo 2007), teachers’ changing attitudes and practices consequent upon the introduction of games. Analysis of specific games produced insights into the ways in which digital games as cultural texts are imbued with ideologies which manifest in their design and in the story elements they incorporate, and the ways in which, as complex, evolving forms they invite analytic strategies which take account of the multifarious ways in which they produce meaning and create subject positions for players. The project developed a model for working with games in the classroom, and for the observation and analysis of play – the games-as-text/games-as-action model. Drawing on classroom case studies and other data, the paper presents an overview of key findings and outcomes, and the recommendations to arise.

BIO
Dr Catherine Beavis is a Professor of Education in the School of Education and Professional Studies at Griffith University. Her research investigates computer games and
young people’s engagement with them, exploring the ways in which games work as new textual worlds for players, embodying and extending ‘new’ literate and multimodal literacies and stretching and changing expectations of and orientations towards literacy and learning. Current research includes the Australian Research Council project: Serious Play: using digital games in school to promote literacy and learning (Beavis, Dezuanni, O’Mara, Prestridge, Rowan, Zagami and Chee 2012-2014)

Dr Clare Bradford is Professor and head of Deakin University’s Centre for Memory, Imagination and Invention (CMII) A fellow of the Australian Academy of the Humanities, her innovative research examines the interplay between children’s literature and social practices, and particularly representations of Indigenous peoples and cultures in children’s books. In 2009 Professor Bradford was awarded the first $225,000 Trudeau Visiting Fellow Prize from the Pierre Elliot Trudeau Foundation. She has published widely on texts for children and their relationships to cultural contexts and practices.

Dr Joanne O’Mara is a Senior Lecturer at Deakin University. Her research investigates innovative pedagogy and practices and the spatial and temporal dimensions of teachers’ work. She has a particular interest in the areas of new literacy studies and the arts and is passionate about her ongoing series of research projects in the areas of drama education pedagogy and practices, digital games, emergent literacies and new textual practices.

Dr Christopher Walsh is an Associate Professor of Education and Director of the Education Program at Torrens University, Australia. He also works on C2Lean: Creative Emotional Reasoning Computational Tools Fostering Co-Creativity in Learning Processes funded by the European Commission's Seventh Framework Programme (http://www.c2learn.eu/) and co-edits Digital Culture & Education (DCE): http://www.digitalcultureandeducation.com/

Dr Tom Apperley is a Senior Lecturer in the School of the Arts and Media, UNSW Australia. His work focuses on gaming rhythms and the body of the gamer. Tom has written widely on these topics and is the author of Gaming rhythms: Play and counterplay, from the situated to the global and the co-editor of Digital Culture & Education.

Dr Amanda Gutierrez is an English and literacy lecturer at the Australian Catholic University. She worked as a research assistant on the computer games project whilst completing her PhD thesis. Her interests lie in the investigation of links between critical literacy, curriculum and teacher practice. In particular she is interested in the ways teachers hybridize their practices based on the environment they are in, including the voices, experiences and types of texts that they value. Contextualising approaches to critical literacies and critical pedagogies, new forms of texts and how these merge with social justice issues underpin her work.

ACKNOWLEDGMENTS
Centre for the Moving Image, the Department of Education and Early Childhood Development, Victoria and the Victorian Association for the Teaching of English.

**BIBLIOGRAPHY**


