Preface

The nature of the education system is becoming increasingly more complex and more globally focused. Today, most effective teaching would incorporate a variety of different media types, or combinations of, as result of this interconnection of media learning and teaching has become much a more complex set of events (CISCO, 2008).

Given the changes that are occurring as a result of globalisation and the proliferation of digital technologies the nature of what is considered ‘core’ educational skills is also evolving. For instance, the nature of literacy has evolved from being able to ‘simply’ decode written information through to acquiring the basic knowledge and skills in reading and writing (Baker & Street, 1994). However the advent of the Internet and increasing access to information and communication technology (ICT), specifically computers, in the late 1990’s has necessitated a broadening of the concept and notion of what is literacy and what it means to be literate in the 21st Century (Lonsdale & Curry, 2004). In recognition, or perhaps as a result of the increasing globalisation and increasing use and reliance on technology, the United Nations (UN) proposed a need to redefine the term ‘literacy’ to acknowledge that the uses of literacy is rapidly being altered in the face of a new economy - the knowledge economy - which is seeing individuals from different social and cultural groups interacting via the use of technology (Lonsdale & Curry, 2004). With this increase use of technology-based communication societies and individuals are bringing into the conversation their own cultural processes, personal circumstances and literacy demands.

These communicative changes led a group of literacy academics in 1996 to coin the term Multiliteracies. Brought together in New Hampshire, New London the proponents of multiliteracies considered the future of literacy teaching and made predictions on how and what should be taught in a rapidly changing world. The New London Group, as they were to be called, believed that multiliteracies best described the emerging, cultural and institutional order of the day. They believed the term encapsulated the ‘multiplicity of communication … and media’ available to learners, whilst also recognising the increasing cultural and linguistic diversity between and amongst learners (Cope & Kalantzis, 2000). However, the New London Group could not have foretold the rapid advances of technology and new communication mediums that have developed in the proceeding years. Accordingly the notion of multiliteracies has evolved.

Reasons for the evolution of multiliteracies, and hence literacy, include the developments of technology, globalisation of national economies, the proliferation of information, lifelong educational experiences, the diversity of cultural perspectives, new teaching and learning practices, a move to make learning possible anywhere and anytime, flexible modes of delivery and the critical dimension of questioning traditional practices. This broadening of traditional notions of literacy led Lonsdale and McCurry (2004) to believe that literacy “is multiple with multiple purposes” (p. 10), meaning that to be literate in a digital world learners need to be able to use a variety of literacy sources, or modes, such as print, visual, auditory, kinaesthetic or any combination thereof. The Internet is a good example of a text which is multimodal as it not only supports print, it also supports sound and pictures - and often with interconnections (hy-
perlinks) between several different literacy sources at once. As such, learners are presented with a range of ways to make meaning of their world and given the interactivity of the technology to also be able to contribute to the world at a personal and global level. For instance, wikis (i.e. Wikipedia) and social networking sites (i.e. FaceBook) allow individuals to communicate to their friends whilst also giving them the opportunity and some might say power, to ‘talk’ to anyone who visits their site.

Chapters of the Text "Technoliteracy, Discourse and Social Practice: Frameworks and Applications in the Digital Age"

This text commences with an introductory overview in **Chapter One** of how society has become increasingly reliant on technology titled *An Overview of Technology in Society: An Introduction to Technoliteracy*. Amanda Walker, Bridgette Huddleston and Darren L. Pullen highlight how a range of digital technologies are interconnected resulting in another form of literacy known as ‘technoliteracy’. This brief overview of technoliteracy is supported by an investigation of both its theoretical and practical applications.

**Chapter Two** is *Designs of Meaning: Redesigning Perceptions of School and Self Using Tactics of Resistance*. In this chapter Donna Mahar has conducted a two year investigation into young adolescents’ use of information communication technology and popular media texts to make sense of themselves and their world. The subject of her study ‘Colleen’ utilises a range of technologies and multiliteracies to challenge social conventions and expectations of behaviour. During this journey Colleen eloquently explains her choices and rationalises her interactions. Her expertise in utilising multiliteracies is an important factor in her ability to defend and support peers who do have the capacity to do so.

**Chapter Three** is named *Hybrid Identity Design Online: Glocal Appropriation as Multiliterate Practice for Civic Pluralism*. Candace Doerr-Stevens investigates the concept of *glocal appropriation*. This is explained as the process native English speakers use to combine local and global resources in strategic ways. This phenomenon is investigated through the case study of one native English speaker and how he has designed new images of self which enables him to participate in and find a space in which to engage in literacy learning in addition to exploring and participating in civic pluralism.

**Chapter Four** is titled *Unpacking Social Inequalities: How a Lack of Technology Integration may Impede the Development of Multiliteracies among Middle School Students in the United States*. Laurie A. Henry examines how limited or no access to technology may result in inequalities for students. The ramifications of this situation, particularly in terms of how it can affect the future of young people is examined along with a range of contextual factors.

**Chapter Five** by Thao Lê and Quynh Lê titled *Information Technology: A Critical Discourse Analysis Perspective* examines the field of Information Technology through a Critical Discourse Analysis (CDA) perspective. In addition to describing a range of new areas which information technology has developed such as e-commerce, e-health and e-learning the authors argue that IT is socially constructed and therefore cannot be divorced from this context. Therefore IT experts, educators and those who utilise IT in instrumental ways are challenged to consider the responsibility they have.

The second section of the text focuses on the practice of technoliteracy. **Chapter Six** by Abbad Albad, Christina Gitsaki and Peter White titled *CALL Course Design for Second Language Learning: A Case Study of Arab EFL Learners* investigates the impact of computers and the Internet on how English Foreign Language (EFL) students learn and how they feel about learning English as a foreign language. The study found that the participants motivation increased substantially when they were able to use a technology based approach when learning a foreign language. The authors therefore propose that a technology-enhanced environment is an important requirement when teaching a foreign language.
Chapter Seven titled ICT in Malay Language Learning: Lessons Learned from Two Case Studies written by Abduyah Yaakub, Christina Gitsaki and Eileen Honan also investigates the complexities involved in learning another language. The authors argue that educators are required to develop a more complex understanding of language and literacy in order to design pedagogies that equip students with 21st century skills. This study is presented via two case studies which examine the complex interaction of teachers, students, writing pedagogies, language curriculum and Information and Communication Technologies (ICT). This chapter builds on the previous one by exploring how students’ experience using ICT to assist them in their writing in a foreign language and also how ICT impacts on writing pedagogy and the curriculum.

Chapter Eight written by Martin Kerby and Margaret Baguley is titled A Snapshot View of how Senior Visual Arts Students Encounter and Engage with Technology in Their Arts Practice. This study investigated three senior art students from two different schools in order to compare and contrast the findings. Although technology is firmly embedded in the daily lives of these students the findings revealed that even though the schools were well resourced, the students often reverted to using traditional media with some technological aspects in the creation of their final work. Interviews were conducted at the beginning, middle and end of the year to provide a snapshot view at these critical stages of how the students work was developing in this critical year of their visual arts studies.

Chapter Nine titled The Bard and the Web: Using Vodcasting to Enhance Teaching of Shakespeare to Pre-Service English Teachers written by Anita Jetnikoff explores the challenges and concerns teachers face when teaching literature considered to be more complex for students such as Shakespeare. The author ponders whether technology can be effectively utilised to engage students in the study of Shakespeare. A series of digital vodcasts utilised by an expert teacher with pre-service English teachers are examined to consider whether using technology participants are familiar with will provide a greater connection with, and insight into, learning about Shakespeare. The ‘cognitive apprenticeship’ model adopted in this study is also examined in its potential to enhance the reflective aspect of professional identity.

Chapter Ten titled Developing Literate Practices in Design and Technology Education by Mike Brown examines how literate practices are demonstrated in the field of Design and Technology. The context of this study is Victorian Year 12 Design and Technology students. This study reveals that there is an increasing demand for literacy skills and expertise from both students and teachers in this area. To support this finding the author has analysed the curriculum and pedagogical practices associated with the mandated Year 12 Design and Technology program in Victoria and has illustrated how multimodal texts in particular are being utilised as an important aspect in this area.

Chapter Eleven concludes this section and is titled Multimedia, Oral History, and Teacher Education: From Community Space to Cyberspace. Jenifer Schneider, James R. King, Deborah Kozdras, James Welsh, and Vanessa Minick have conducted a study at a Catholic PreK-8 school/parish community where pre-service teachers have worked with elementary students to create a range of multi-media projects. These projects, in addition to showcasing the oral histories of the participants, places and events of the school and church community, have allowed the pre-service teachers to integrate technology into their teaching. The study revealed that the pre-service teachers utilised ‘fast’ literacies when learning to incorporate technology into their teaching. In addition it became evident that there was an intersection evident through the use of technoliteracies between the school and the community.

Section Three of the text investigates the literacy of gaming. Chapter Twelve titled The Hidden Literacies of Massively Multiplayer Online Games written by P.G. Schrader and K.A Lawless, examines the multiliteracies associated with Massively Multiplayer Online Games also known as MMOGs. This chapter describes the nature of and examines the type of technologies used in these types of games. The games are based on the idea of supply and demand and therefore the study investigates the multiliteracies
of consumption and production in an effort to provide an understanding of the nature of skills necessary
to function in a multiliterate and multimodal world.

Chapter Thirteen written by Pam Wright and David Skidmore is titled Multiliteracies and Games:
Do Cybergamers Dream of Pedagogic Sheep? In this chapter the authors examine the way in which
educators in a multi-literate society are expected to engage students to interact and interpret a multitude
of new literacies. The authors explore how multiliteracies are bound up in computer games and consider
how educators can employ these games through play, study and creation to shift students from consum-
ers to creators of interactive narratives. This chapter also considers how computer games can be used in
the primary classroom and in this process argues for an integrated approach to teacher and pre-service
teacher professional development in the area of computer gaming.

Chapter Fourteen, the final chapter in this text, is written by Robyn Henderson and is titled Learning
from Computer Games: Literacy Learning in a Virtual World. Through an autoethnographic approach
the author investigates the Massively Multiplayer Online Game the World of Warcraft™ produced by
Blizzard Entertainment®. During this process the author created an avatar and joined the online community
of the World of Warcraft™. The chapter explores the strategies the author used to access and
navigate this MMOG with particular attention given to the game’s linguistic, visual, audio, spatial and
gestural elements of design to provide an insider’s perspective of the meaning-making resources that
were offered. The chapter concludes with some considerations given as to how a virtual world might
inform the learning of literacies in schools and other institutions.

CONCLUSION

Each of the chapters in Technoliteracy, Discourse and Social Practice: Frameworks and Applications in
the Digital Age provides a unique and important insight into the diverse approaches to and implementation
of technoliteracy in different contexts. It is evident that the authors comprehend the significance and value
of preparing students, educators and those responsible for Information Technology to use effectively and
ethically to enhance learning. These dimensions are particularly evident in the first section of the book.
An examination of the practical applications of ICT is of interest to practitioners and others interested in
this area. How ICT is utilised in the classroom to enhance the way students learn and to utilise a form of
communication many of them are comfortable with provides important information for educators. The
building upon of research in this way results in a richer and more comprehensive understanding of how
this important field is being utilised in education. The final section provides an important examination
of how gaming combines a range of literacies and in the process develops quite sophisticated skills in
its players. The ability to navigate complex levels of multimedia text and interactive elements requires
advanced skills in multiliteracies. These skills are imperative to function in an increasingly visual world
which relies on tacit understandings of a number of conventions to function effectively. The multilteracies
approach advocated by The New London Group has been transformed into a technoliteracies approach
which complements their concern that young people need to be prepared so that they can operate in a
world in which their quality of life is enhanced by whatever means they use to communicate.

REFERENCES

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