GLOBAL TRENDS IN ART EDUCATION:
NEW TECHNOLOGIES AND THE PARADIGM SHIFT TO VISUAL LITERACY

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Abstract

New or emerging contexts for learning are currently at the forefront of educational enquiry. The current search for or combination of emerging pedagogies with new technologies poses an exciting challenge for art education. Globally, what is 'new' in art education today is not necessarily original but can be viewed as a re-emergence or re-conceptualisation of the role of visual literacy within the discipline.

Keywords

Visual literacy, literacy, technology

Introduction

Global trends include rapid technological and cultural shifts evidenced by the move from paper based textual environments to image dominated multi-modal practices. A multi-literate society has been acknowledged

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internationally as a goal for all students. Determination of which literacies should be dominant or take precedent contributes to on-going and fruitful debate. Howard Gardner (1999) suggests the traditional view of literacy should change and proposes ' *the very notion of literacy is being altered… to function in hypermedia, to read and design web pages and embark on computer based projects one must orchestrate a fresh amalgam of graphic, linguistic and auditory literacies. There is every reason to believe that these literacies will continue to proliferate'*

A new literacy is rapidly emerging, which is both valuable and necessary to extend students currently engaged in both the traditional or technological classroom. Although *visual literacy* is neither new in definition or practice, what is new is that art practitioners have seen the political and educational need to identify with an area of learning to which they can claim ownership. As Raney (1999:41), believes '*if one thing is clear it is the term 'visual literacy'* is controversial'. Visual literacy is not necessarily a new pedagogy, for example first international conference for visual literacy was held in Chicago in 1970 (source; International Visual Literacy Association). Visual literacy can be best viewed as an emerging pedagogy.

Visual Literacy

Braden (1996) identifies two major impediments to researching and understanding of the term *visual literacy*: a lack of a widely accepted definition, as well as a lack of cohesive theory. The history of visual literacy has seen definitional controversy with educators regularly providing different assumptions (Sinatra, 1986; Boughton, 1986; Messaris, 1994; Kazmierczak, 2001). Jonassen and Fork (1975) contend that visual literacy is 'eclectic in origin', supported by other researchers claiming elusiveness of the term and the difficulty in proffering a definition (Braden and Hortin, 1982; Sinatra, 1988). Numerous definitions have been encountered over the past three decades representing areas such as, visual/graphic representation, visual communication, semiotics, iconography, to name a few. (Debes, 1968; Ausburn & Ausburn,1978; Messaris, 1995).

Bamford (2003) proposes that visual literacy is not something that be confined or attributed to one particular area of the curriculum and outlines a

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number of disciplines including visual arts, art history, aesthetics, linguistics, philosophy, psychology, perceptual physiology, sociology, cultural studies, media studies, instructional design, semiotics, communication studies and educational technology.

Visual literacy, has been defined in educational terms as the study of visual modalities of communication. Simply, visual literacy is the ability to critically understand, interpret and create visual images. Muffoletto (2001: 2) confirms that *'like texts, visual representations (visual texts) are the result of ideologically formed intentional acts. The image then, as a result of an intentional act (either internal or external) is better understood as a text to be read, a constructed meaning'*. Images play a major role in understanding the world, as the information age has led to the need to process volumes of data quickly and efficiently. Visual communication is becoming less the domain of specialists and more crucial to public communication (Kress & Van Leeuwen, 1996)

Kress & Van Leeuwen (1996), propose that not being visually literate will begin to attract social sanctions and that visual literacy will begin to be a matter of survival especially in the workplace. Visual literacy skills have evolved as Neisser (1997), puts it, a society wide dependence on visual technologies. Students require the necessary visual literacy skills due to our cultural dependence on visual media. (Roblyer & Bennett, 2001).

Visual literacy skills are now vital for both elementary and secondary school students of art to be able to read and interpret material presented to them. (Hubbard & Greh, 1991; Hubbard, Mengshoel, Moon, & Kim, 1997; Christopherson, 1997; Roblyer, 1998; Roblyer & Bennett, 2001, Brown and Bamford, 2002).

The increased saturation of new technologies has presented the learner with an increased exposure to images. Understanding and interpretation in both electronic and traditional visual formats challenges the nature of con-structing meaning. Add to that the increased nature of interactivity provided by emerging technologies, then new and exciting challenges are provided for students in the art classroom. Effectively participating in this new learning requires skills not necessarily nor adequately provided for by traditional education practices. Construction of meaning through visual means requires

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a broader range of skills yet to be developed in educators so far. Students need to move from merely describing to critically analyzing. Teachers need to provide experiences for their students to construct new meaning, reason and reflect on decisions.

Students today need to be equipped to create, interpret and interrogate images. Roblyer and Bennett (2001), contend that it is essential that visual literacy skills be added to a growing list of new capabilities, while Unsworth (2001), supports this notion by stating that the development of this new knowledge requires a meta-language, that is a language for describing images and meaning-making inter-modal interactions. The complexity in identifying the skills, knowledge and competencies required sometimes leads to this important literacy becoming the forgotten pedagogy.

Messaris (1994), provides four aspects to the term visual literacy: a pre-requisite for the comprehension of visual media (students recognize that mediated images as illusions of reality); general cognitive consequences of visual literacy (students understand the world in terms of social behaviours through perceptual skills such as spatial accuracy and hand-eye co-ordination); awareness of visual manipulation (students learn and are aware of how visual messages are created, and manipulated for persuasion) and aesthetic appreciation (students explore the aesthetic element embedded in the creation of the message). (Natharius, 2004).

Christopherson (1997), provides a concise definition of visual literacy by stating visual literacy provides the critical ability to enable people to use visual images accurately and therefore behave appropriately. Christopherson proposes a skill list which this paper endorses according skill, competencies and knowledge required by a learner confronted by the new technologies of today.

Christopherson (1997:173) proposes that a visually literate student would have the following skills:

- Interpret, understand, and appreciate the meaning of visual messages;
- Communicate more effectively through applying the basic principles and concepts of visual design;
- Produce visual messages using the computer and other technology; and

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• Use visual thinking to conceptualise solutions to problems

The latest attempt at defining the elusive term, visual literacy, is proposed by Maria Avgerinou (2001), who has comprehensively researched a history of visual literacy definitions and purports the following, in the context of human, intentional visual communication, '*visual literacy refers to a group of largely acquired abilities, i.e. the abilities to understand (read, and to use (write) images, as well as to think and learn in terms of images*'.

Recent curriculum changes in all states of Australia are choosing to emphasise the importance of visual literacy and learning through visual means. While traditionally an area associated with visual arts curriculum, visual literacy is now a component of syllabi in english, mathematics, history, geography, computer studies, visual communication and design and technology. It is becoming a recognised literacy in both elementary and secondary schools. Recently, as well there has been the Australian wide promotion of the greater integration of technology and media literacies into all areas of the curriculum.

According to Raney (1999), visual literacy has been enshrined in the English National Curriculum since the early 90s. Within an Australian context the term visual literacy can be found in the New South Wales (NSW) Board of Studies Visual Arts Year 7-10 syllabus, the Graphics Technology 7-10 syllabus and the Visual Design 7-10 syllabus. It appears in a cursory manner stating, '*students also develop visual literacy through the development of skills in viewing and interpreting a diverse range of artworks as text'* (p. 29). It is interesting to note that in NSW visual literacy is also included in the English Years 7-10 syllabus, where it suggests a much more detailed and inclusive development, as well as providing a broader explicit definition of the literacy. As well. the Ontario Curriculum for Grades 9 and 10: The Arts, also uses a broader definition of visual literacy stating '*within these courses, visual literacy expands into a broader perception – turning seeing into vision, translating reality into symbols and connections, and enhancing all other learning experiences'*. (p.47)

Art students, be they elementary, secondary or tertiary, require the development of a unique set of skills which equips them to function in this new technological era. Minimal competency would be the ability to create

meanings and develop a language for visual technology to communicate their ideas. Crucial skills would include the ability to think critically and visually. Visual literacy is not merely acquired, but must be learnt. Therefore, like reading and writing, it needs to be taught.

Exposure to images has been evident since prehistoric times, but was has changed since those times or since 1970 is the increased proliferation of technology, which has resulted in a saturation of excessive information, image projection and the need for new competencies. Included with the tangible change to schooling comes the changing nature of cognitive processing. According to Roblyer and Bennett (2001), it is essential that visual literacy skills be added to the growing list of new capabilities required, not only for students but teachers.

While there is agreement that new technologies provide the tool for change, Roblyer and Bennett (2001), propose that not only can technology help teach visual literacy, the skills acquired in visual analysis can also be effective to enhance technology use. Roblyer and Bennett (2001), go as far as claiming visual literacy should be seen as the 'fifth literacy', joining computer and technology literacy as a requirement for well prepared teachers.

Pedagogy involves equipping new teachers with the necessary skills to survive the 'Net revolution'. As the new order of pedagogy emerges, the overlap between visual literacy and technology also emerges. Technology assists in the teaching of visual literacy. Like any new pedagogy, careful scrutiny by educators to filter the necessary skills and knowledge is imperative.

In a digital age, art classrooms are as well equipped with digital cameras, computers, scanners and printers as they are with paint, brushes and paper. Students need to be equipped with the skills and knowledge to understand and process visual imagery. As Natharius (2004:238) states *we have moved from a world of literacy to a world of visuality'*.

To make the necessary changes to practice, teachers must not only recognise the need for change in their student's skills, they must also develop their own literacy skills. Teachers must model the required skills and develop the required skills if lacking. Pre-service curriculum and content should embrace the visual nature of learning, while recognising the differing

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styles of learners. Teachers have successfully embedded technological learning into their pedagogy repertoire, including multimedia, on-line learning and web design. Now is the opportunity to compliment their competencies with visual literacy skills, which will inevitably enhance their teaching practice.

Roblyer and Bennett (2001), propose that teachers will require skills that enable them to select appropriate materials for meaningful instruction, that support the effective production of materials, the design and teaching of specific activities that will facilitate deep learning as well as the ability to evaluate the level of student's visual literacy.

Students require a specific skill set that will equip them in technologically rich environments. Immersion and exposure to visual images does not alone provide the necessary critical skills to master literacy. It is imperative, that living in what Roblyer and Bennett (2001), refer to as our *'information and image permeated'* society, further enquiry needs to be undertaken on the impact of creating and interpreting images. This paper emphasises the need, not only for interpretation and appreciation, but for image creation and manipulation. Research has demonstrated that interpretation, appreciation, image creation and manipulation go hand in hand (Brown and Bamford, 2002). Student's skills in encoding and decoding, especially in the form of new technologies, should be encouraged and developed.

Art students today need more than skills in interrogation and art appreciation. They need to think and analyse critically. As in text analysis, students need explore or question an image to derive possible solutions, integrating information, background and meaning to be convinced or to justify a conclusion. Appreciation is more than merely describing or making judgment. As Kurfis (1988), suggests *'in critical thinking, all assumptions are open to question, divergent views are actively sought, and the inquiry is not biased in favor of a particular outcome'*. Immersed in an image saturated world students need to check for validity, or 'factuality'. It is important to understand meaning, check on beliefs and draw reasonable conclusions. Art students need to argue positions and adopt an informed critical approach to image appreciation: the essence of visual literacy. Art education is inextricably related to how knowledge is constructed, the values and practices of the discipline.

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Policy makers, curriculum developers and course designers must scruti-nise closely course content both at the school level and the pre-service teacher education area to determine whether opportunities exist for students to interpret, understand and appreciate visual messages. Recent research has developed a stronger case, in pedagogical foundations, for the strength-ening (and in some cases the introduction) of good visual design principles in learning contexts. (Brown, 2000, Brown, 2001).

Flexibility in curriculum planning should allow for students to produce and manipulate images through technology and interrogate meaning. (Brown & Bamford, 2002). It is now possible to identify the basic tenets or skills required to produce visually literate students and teachers. All learners need the necessary visual skills, knowledge and competencies to thrive in this technological age. The following list of skills or principles should be the mini-mum requirement and included for all 'learners' (elementary, secondary and tertiary):

- Learners need skills in understanding relationships between technologi-cal and meaning-creating practice
- Learners need to develop a visual language/learnable grammar (includ-ing a technological language)
- Learners should be exposed to and have an understanding of visual design principles
- Learners need experiences which allows them to understand, interpret and appreciate visual messages (including encoding and decoding)
- Learners should create and manipulate images
- Learners need to conceptualise thoughts, knowledge and meaning visually
- Learners need to see connections between aesthetics, visual communi-cation and message design
- Learners need experiences using visual perception
- Learners need experiences in viewing, thinking, reasoning in a critical manner

Conclusion

The argument for greater inclusion of visual literacy as a new emerging

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pedagogy is made. As an evolving global trend in education, visual literacy requires closer examination by art educators for the benefits for their students. Further, rethinking of literacy is required. There are differing attitudes towards the acceptance of visual literacy, no more than in the art education world. As Raney (1999) questions: is visual literacy unhelpful or even sinister, vague, patronizing or liberating? What is evident is that more research and greater debate is required internationally. Art education today should embrace any new literacy which describes and strengthens its discipline especially one which begins with the word 'visual'.

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