Teaching Digital Media To Digital Natives

Grant Stevens
Visual Arts, Creative Industries
Faculty, Queensland University of
Technology
Victoria Park Rd, Kelvin Grove, QLD,
4059, Australia
E-mail: g.stevens@qut.edu.au

Abstract
The majority of today's undergraduate students are 'digital natives'; a generation born into a world shaped by digital technologies. It is important to understand the significance of this when considering how to teach Digital Media to digital natives. This paper examines the analogies to literacy that recur in digital native debates. It argues that if the concept of digital literacy is to be useful, educators must attend to the multiple layers and proficiencies that comprise literacy. Rather than completely dispose of old teaching methods, updated pedagogical practices should integrate analysis and critique with exploratory and creative modes of learning.

Keywords: digital natives, digital media, literacy, art, pedagogy, teaching practices

This paper draws on my experiences teaching and researching an undergraduate subject called Digital Media. The primary aim of Digital Media is to provide first year Visual Arts students with the skills to employ moving images in their studio art practice. This paper examines a set of assumptions attributed to the generation that currently comprise the majority of my students, and indeed the majority of incoming undergraduate students [1]. This generation, often called 'digital natives', has grown up in a world shaped by digital technologies [2]. Because of this, they are supposed to learn very differently from the generations before them. This logic is currently filtering through the higher education sector, sometimes leading to calls for extensive reform to accommodate the needs of these new learners [3]. This paper focuses specifically on the rhetoric surrounding this generation of learners, and its relationship to older pedagogic ideas, namely the concept of 'literacy'. I argue that, if they are to be useful when teaching digital media to digital natives, analogies between digital technologies and literacy require educators to comprehend all aspects of literacy as a learnt and multi-layered set of skills.

In his influential article "Digital Natives, Digital Immigrants", Marc Prensky describes digital natives as "'native speakers' of the digital language of computers, video games and the Internet" [4]. Born anywhere between 1980 and 2002 [5], Prensky argues that this generation are utterly techno-philic, and that they move seamlessly across the emerging digital interfaces, hardware and software that shape our contemporary realities [6]. As students, they are supposed to be radically different from their teachers, 'digital immigrants' who began using digital technologies later in life [7]. Unlike digital natives, digital immigrants are trying to learn digital technology as a 'second language', and are supposedly stubbornly and nostalgically inclined towards the 'good old days' of heritage skills and traditional teaching practices [8]. For digital immigrant educators to keep up with (let alone teach) their already-fluent students, Prensky calls for the radical renovation of teaching methods, chiefly to integrate new technologies into classroom environments and learning tasks.

On the surface, Prensky's argument makes sense. In my classrooms, students often open multiple applications, multiple browser windows, log in to social networking sites, place smart phones next to computer mice and compulsively click and flick between learning and social activities. Illuminated by glowing screens and tethered to devices with headphones, these students appear consigned to what Sherry Turkle calls modes of "copresence" and "partial attention" [9]; they keep their options open to tune in and out of multiple real and virtual environments. And yet, despite this distracting modus operandi, the vast majority of these students successfully pass their assessment items, sometimes with high distinction. In doing so, they demonstrate that they are learning.

My Digital Media classrooms are also already full of integrated technologies. Digital Media students sit at computers in order to watch, debate and create moving images. Industry-standard hardware and software, as well as popular screen culture interfaces like YouTube, are already blended into learning activities and assessment tasks. Prensky advocates using contemporary technologies and interfaces to help students learn in other disciplines, however his approach does not fit neatly with the teaching of digital media to digital natives.

Part of the problem with Prensky's argument is that it oversimplifies a generation. As Jason Sternberg points out, the hyperbolic tone of these arguments seems to characterise students conversely as technology-addicted zombies mindlessly wandering through their degrees, or as revolutionising how we think about information, knowledge and pedagogy [10]. Sternberg suggests that these debates risk homogenising student diversity and ignore students' ambivalence towards technology. More balanced understandings of the implications of the widespread 'socialisation' of digital technologies are clearly needed. In the realm of higher education, these conditions also require more measured and thorough understandings of pedagogical approaches that use analogies to literacy.

The allusions to traditional concepts of literacy throughout digital native discourse are perhaps so obvious that they remain largely unqualified and unexamined. The logic is that digital natives are 'native speakers' of digital technologies, and can therefore already read and write digital languages across all aspects of their lives. This gives them an advantage over digital immigrants who are struggling to adapt to a world suddenly speaking a new language. In reality however, this broad account does not acknowledge the diversity of experiences and competencies both within and across generational lines [11]. This is partly because Prensky's formulation also proposes that new digital media initiate completely new ways of communicating that entirely usurp old ones.

Contrary to this view, media theorist Lev Manovich has written extensively on the correlations between old and new media [12]. While he argues that digital media are indeed transforming contemporary cultural languages, he emphasises lines of continuity that connect related audio-visual forms:

> A hundred years after cinema's birth, cinematic ways of seeing the world, of structuring time, of narrating a story, of linking one experience to the next, have become the basic means by which computer users access and interact with all cultural data. [13]

For Manovich, new digital formats can be understood as extensions and adaptations of old analogue ones, rather than radical breaks with the past. In the context of higher education today, acknowledging this slower evolution of media languages allows for more complex and nuanced understandings of diverse digital competencies and literacies.

However, there is another more basic proposition underlying Prensky's and Manovich's assertions that must also be understood: that analogies between language and the audio-visual

paradigms of new screen technologies are indeed appropriate and valuable. It seems commonplace now to refer to people as visual literates, native speakers of audio-visual languages, and so on. However, to fully understand the pedagogical potential of these analogies, the operations of literacy require close consideration [14].

In discussing the application of literacy to the field of visual culture, W.J.T. Mitchell argues that while useful and insightful, the analogy runs the risk of perpetuating an unwanted dichotomy between the apparently natural and automatic functions of vision on the one hand, and the constructed, *enculturated*, language-like operations of representation on the other [15]. In other words, if blindly applied, linguistic metaphors and analogies to literacy risk flattening the entire field of visual culture. The danger is that they ignore the differences between vision as a 'naturalised' human sense, and representation as a process of mediation and communication.

The same risk applies to the digital native debate, and this is precisely the shortcoming of Prensky's argument. He establishes a view of 'digital natives' as naturalised users of digital media, and therefore as being always already cognizant of their engagement with various aspects of technology and visual culture. However, by naturalising the audio-visual languages of digital media, Prensky fails to accommodate the discipline- and medium-specific aspects of this new mode of literacy. In effect, he simplifies digital literacy to the ability to perform digital tasks. In doing so, he ignores potentially higher-level forms and applications of literacy, what Sonia Livingstone identifies as "the ability to access, analyze, evaluate, and create" [16].

The real issue here is that many digital native debates gloss over the differences between literacy as an intuitive capacity and a learned set of skills. As linguist James Gee argues, *acquiring* a language is very different to *learning* one [17]. There are degrees of proficiency. In his terms:

> Acquisition is a process of acquiring something subconsciously by exposure to models and a process of trial and error, without a process of formal teaching. It happens in natural settings which are meaningful and functional in the sense that the acquirer knows that he needs to acquire the thing he is exposed to in order to function and the acquirer in fact wants to so function. [18]

Unlike acquisition, processes of learning require meta-level skills, competencies and capacities.

> Learning is a process that involves conscious knowledge gained through teaching […]. This teaching involves explanation and analysis, that is, breaking down the thing to be learned into its analytic parts. It inherently involves attaining, along with the matter being taught, some degree of meta-knowledge about the matter. [19]

Prensky assumes that digital natives acquire digital literacy through 'natural' exposure and absorption. If this is so, they may be adept at performing tasks through their interfaces, but they may not yet have learnt to analyse and explain their complex layers of mediation and meaning. Many Digital Media students can quickly navigate, follow and apply digital information. However, demonstrating increased mastery demands more than simply re-performing an attained language. It means developing the skills to analyse, dissect, discern, evaluate, critique and re-imagine [20]. If these students are to become the informed, critically engaged cultural professionals of the near future, these meta-level skills and competencies must be the pedagogical focus when teaching digital media to digital natives.

Some teaching practices that actively address these concerns are emerging. Contrary to Prensky's call for the widespread digitization of teaching methods, some of these practices look decidedly 'old school'. For example, Mitchell's learning activity "Showing Seeing" is an adaptation of one of the simplest and perhaps oldest pedagogical activities: show-and-tell [21]. For this task, Mitchell asks students to assume the role of an alien anthropologist who is unfamiliar with the fundamental physical, optical and cultural characteristics of vision. Their task is to explain the nature of vision to an audience that is unfamiliar with this basic human sense. The objective is to fundamentally divorce, if only for a moment, the instinctive qualities of seeing from more sophisticated modes of interpreting cultural artifacts. The activity encourages students to attentively interpret naturalised vision: to do a 'double take' on their own instinctual ways of navigating their visual environments.

Bevin Yeatman's and Sean Cubitt's teaching practices in the field of Media Studies are also worthy of consideration. Like Mitchell, their goal is to enable students to engage knowingly with their cultural environments now and into the future. Against the institutionalised binary of theory and practice, Yeatman and Cubitt seek to reorient their teaching practices around new terms: the creative and the critical [22]. Their strategy has been to introduce creativity into theory courses that were previously dominated by textual exposition and essay writing. By integrating audio-visual technologies and communicative modes into their teaching they have sought to intersect creative learning activities with more traditional text-based forms of analysis and critique. Yeatman and Cubitt argue that the long-lasting and transferrable benefits of current higher education will neither involve proficiency in one media, nor expertise in cocooned theory departments. Instead, the most important skills for this generation of graduates will be the abilities to move thoughtfully, knowingly and critically through the plethora of new technologies that will inevitably continue to emerge into the future. Any principled educator surely holds this motivation in high regard.

My teaching practices in Digital Media take their cues from these examples. The subject is based on the contention that if learning digital media is to be useful to students beyond the lifespan of specific software and hardware, and beyond the limits of medium-specific practices, this learning must focus on much more than technical skills. Like Yeatman and Cubitt, my teaching focuses on actively and explicitly coupling critical and creative modes of engagement. And like Mitchell, it seeks ways to defamiliarise instinctual patterns of spectatorship. Digital Media lectures and tutorials introduce students to methods of close analysis. Through the shot-by-shot dissection of a broad range of audio-visual examples drawn from throughout the history of the moving image, students learn to slow down their spectatorship and to pay attention to the formal construction of audio-visual artifacts. Diverse examples are used to demonstrate the varying communicative roles of continuity editing, montage, shot type, camera movement, composition, diegetic and non-diegetic sound, and other important formal elements. These

are strategies to develop meta-level literacy skills.

The culminating points of these learning activities are two assessment items: an Oral Critique task where students analyse the formal construction of a moving image example, and a Creative Work task where students translate these analytical skills by creating their own three to four minute video. The goal of this task is to encourage students to experiment with the audio-visual conventions of moving images to explore how meaning is constructed.

In their work for this second assessment item, varying degrees of visual literacy become evident. Students are openly encouraged to use the brief to explore their own specific interests in visual culture. The works submitted therefore often adopt the presentation formats and languages of popular screen culture. This is one of the intentions of the task: to encourage students to actively and knowingly engage with moving images as a way to demystify how they work. The music video genre is by far the most common format that students adopt, but travel-log, cooking demonstration, dream sequence and mockumentary are also popular. Competent students readily appropriate the shot types, aural structures and editing patterns of these formats. However, they do not always do so in ways that transform, manipulate or significantly alter the original templates. These students therefore demonstrate levels of literacy that mime and re-perform the languages of popular culture. In these ways, they are incrementally adding to their *acquired* language skills.

Other students, however, demonstrate *learned* meta-level literacies. The common traits among these higher-achieving students are that they risk using ambiguity, confusion and non-sense as ways to actively engage with an array of contemporary mediated representations. These videos use a variety of formal techniques, but prominent features are abstraction, distortion, montage, manipulated sound, repetition and forms of spatial and temporal discontinuity. For example, in one student's video, a series of static camera shots detail twilight scenes of suburbia. The sequence cuts between interiors and exteriors, long shots and close ups, all set to a slowly building creepy soundtrack. As night sets in, a train rockets by and the intensity of the soundtrack increases. The first sign of a human figure is a hand opening some blinds and a silhouette approaching a

screen door from the dark interior of a suburban home. A young female figure looks out through the screen before the video cuts to black. A second later, the video concludes with the sound of birds chirping and an image of trees at sunrise.

This video borrows cinematic conventions from sources such as Stanley Kubick's *The Shining* [23] and David Lynch's *Blue Velvet* [24], both of which feature as teaching resources during the semester. Like those films, this video is an effective study of the dark potential lying dormant in seemingly innocuous suburban ambience and architecture. Through its considered compositions, tight editing and evocative sound it creates a compelling and anxious portrait of commonplace settings and experiences.

In another student's work, found footage of young people playing videogames is combined with game-play screen captures, music videos and advertisements. The different sources are montaged in a way that alludes to a narrative relationship between real and gaming environments. However, it becomes increasingly difficult to follow which characters are playing the game and which are being played. This disorienting effect is further enhanced by visual effects that pixelate and flatten the different kinds of footage. Error messages begin flashing on screen and the sound becomes further distorted. The video is edited quickly and the overall effect is to deliberately confuse the real and digital worlds. It is willfully incomprehensible.

Through these formal techniques, these and other students demonstrate the critical mindset that Yeatman and Cubitt describe as "the basic refusal to accept" [25]. By experimenting with formal and symbolic audio-visual codes, they deconstruct and re-imagine the languages of digital media. Such critical-creative outcomes represent advanced literacy skills through their thoughtful, knowing and speculative modes of engagement. They are at their most evocative when breaking the *acquired* rules of language, thereby enabling unplanned and unpredictable symbolic possibilities. These examples are evidence of what can emerge when creative and critical approaches are combined. They demonstrate the potential for *learned* visual literacies to provide students with the skills, knowledge and tools to challenge and critique *acquired* languages.

There is much more to be done in in the development of teaching practices that encourage more students to adopt these exploratory and critical

strategies in their studies. One obvious goal is to create learning environments that encourage more students to experiment with and break the audio-visual languages of popular visual culture. As digital technologies and interfaces continue to develop, further work can also be done to more fully understand the literacy metaphor in terms of networked and interactive media and their potential roles in an evolving digital grammar. Against calls for scrapping 'old school' teaching practices, I believe this requires an even greater emphasis on embedding long-established skills of analysis, interpretation and critique. Traditional concepts of literacy are highly valuable in this context, but only when they are applied in their fullest sense: as an interrelated and multi-layered set of skills that allow students to knowingly 'mess' with the rules of their acquired digital languages.

As increasing access to new technologies continues to reduce the gap between the technical proficiencies of professional and amateur creative practitioners, meta-level literacy skills will be the prized attribute of those wishing to excel, lead, critique and create. It is up to educators to challenge students to develop and apply analytical skills and critical thinking across the diversity of their experiences and activities, including (perhaps especially) creative ones. Defamiliarising patterns of spectatorship, and closely integrating modes of critique and creativity can enable digital natives to make informed and challenging contributions to the evolving social, cultural and technological conditions of the future.

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