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Flash points: Reading electronic literature as a metaphor for creativity

Abstract:
In her groundbreaking volume *Electronic Literature: New Horizons for the Literary* (2008), N. Katherine Hayles describes the concept of a ‘flash point’ as a moment within pedagogy or teaching practice when a student grasps the complex potential of a digital work. As a form of pedagogical breakthrough moment, the concept of the flash point also alludes to a mode of creativity that acknowledges the possibility that neurological processes can be replicated, if only metaphorically, in creative works. In this article, we explore the possibilities suggested by the idea of the flash point as a teaching model and as a metaphor for creativity beyond the teaching of digital literature. We build upon our experiences as teachers within a digital literary and creative writing context, respectively. What the two different writing and teaching contexts have in common is the fostering of writing in a digital age as a central practice. The article examines how digital media and writing come together in pedagogical practices. If creativity can be prompted in such intimately felt moments by an interface or digital media experience, can the creation of electronic or digital literature also act as a model for learning within the humanities and the arts more generally, as the use of digital tools spreads?

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**Keywords:**

Electronic literature – Metaphors – Anecdotes – Multimodal teaching
Introduction: Defining Hayles’s notion of the ‘flash point’

The term ‘flash point’ (or ‘flashpoint’) has several meanings. It can be defined as ‘a point or place at which anger or violence flares up’ (Concise OED 2008: 541); refers technically, in chemistry, to the temperature at which a substance ignites; but is often used metaphorically in other contexts. In a geo-political context, for example, one might refer to North Korea as a flash point for tensions in northeast Asia; while in a financial context one might speak of the downgrading of a certain bank’s (or country’s) credit rating as a flash point that leads to further significant economic events. However, in this article we will discuss N. Katherine Hayles’s understanding of a flash point, as mentioned in her book Electronic Literature (2008), in which she defines a ‘flash point’ as a moment within teaching or pedagogy in which particular lessons, theoretical points or creative techniques are transmitted from teacher to student, and perhaps even vice versa.

According to Fowler, metaphor ‘occurs as often as we take a word out of its original sphere and apply it to new circumstances’ (1908: 66-7). Hayles’s use of the term flash point is an example of a metaphor because she is obviously not speaking literally about the ignition of chemicals, although we would argue that chemical (or at least neurological) processes are implied in this particular usage. While the term may be a throwaway one within the context of the book itself – indeed, Hayles’s description of the flash point is the sole pedagogical moment within Electronic Literature – we will discuss it in terms of its metaphorical implications for teaching and learning, especially for the teaching of electronic literature and new media works.

Hayles mentions the concept only once in her book, during a discussion of her experience of teaching Talan Memmott’s Lexia to Perplexia (2000), a work of electronic literature that plays on notions of the body and the machine and ‘reflects upon its own hyper-attentive aesthetics’ (Hayles 2008: 124). In a rare instance of anecdote, Hayles continues as follows:

In my experience teaching this work, I find that an effective strategy is to form two-person teams between experienced gamers and textual critics such as English graduate students who have read considerable critical theory. In discussions that emerge between team members, the partners typically express distaste for some of the work’s strategies and admiration for others. The flash point comes when they discover their critical evaluations are mirror images of one another, leading to further discussions about how different interpretive traditions and media experiences precondition the work’s reception. In terms of the complex dynamics between body and machine, we might say that the gamer and textual critic have had their neural plasticities shaped in different but overlapping ways (Hayles 2008: 124, emphasis added).

Leaving aside for the moment the slightly contrived pedagogical moment described here – how many teachers are likely to be able to locate suitable teams of ‘gamers’ and ‘textual critics’ within their class groups? – the anecdote is important for at least two, overlapping reasons. Firstly, it attempts to define the kind of moment in teaching that is notoriously hard to locate or identify. The flash point – which might otherwise be referred to as a ‘Eureka moment’ (Vitale 2012) or more casually as an ‘a-ha’ (Roberts & Smith 2002) or ‘breakthrough’ moment (Barnes 2000) – might involve the
pedagogical intervention of the teacher, a moment of peer learning between students, or even a moment experienced by a student in isolation. The self-reflexivity of the text also echoes the kinds of thought processes and moments of self-awareness that enable the students to reach a point of realisation both about the materiality of the work itself and the students’ own learning processes. As such, the flash point stands as a metaphor for a wide variety of dialogic moments in teaching where students, teachers and ideas (theoretically) interact, leading to (sometimes unquantifiable) outcomes. The dialogic process, borrowing from Bakhtin’s understanding of dialogicism (1981), suggests that there is not one predetermined outcome for learning situations since each instance involves new students, contexts, and experiences that come into play. In this context, then, the flash point becomes a moment of clarity as to how the various elements (students, teachers, ideas, context) produce learning in that particular moment.

Hayles’s reference to ‘neural plasticities’ makes clear the metaphorical connections she argues for throughout Electronic Literature, at least in terms of the parallels between thought processes and the computational and algorithmic processes that together combine to form the reception of works of electronic literature. We will not at this stage discuss Hayles’s notion of human-machine interaction (2005) in great detail; however, we suggest that the flash point can serve as an interesting metaphor for creativity and the fostering of creativity within pedagogical settings. Hayles’s understanding of the interrelated feedback loop between human reader and networked digital machine forms the basis for how she understands materiality in electronic literature: ‘materality emerges from the dynamic interplay between the richness of a physically robust world and human intelligence as it crafts this physicality to create meaning’ (2005: 33). From our perspective as teachers and researchers investigating electronic literature, the term flash point and its basis in Hayles’s understanding of materiality in digital environments reveals echoes of electrical circuits, neural pathways, flows of information and the physicality of new media works. This context offers us an intriguing entrance to further discussions of the usefulness of certain pedagogical methods, not to mention particular works of electronic literature, within a classroom setting. Our goal, therefore, is to explore a similar feedback loop in the classroom as the one Hayles describes for the meaning-making processes of electronic literature.

During a recent workshop organised as part of the ELMCIP project, we interviewed academics and new media artists and asked them to nominate examples of flash points they may have experienced in their own teaching. The responses were predictably varied, and drew out for us the tensions between the formerly distinct positions of writers and scholars within the field of literature.

New media theorist and author Jay David Bolter articulated the position of teachers whose students possess new and perhaps slightly unfamiliar sets of new media knowledge:

I’ve probably have had fewer flash points than many in the sense that I’m not sure that I’ve always been successful in engaging students in interesting ways with digital media but I think that the flash points come, when they do come, as more events that the
students not only experience but generate. In other words, the thing about pedagogy with these new media environments is that it’s very participatory, and students often take over the class, hijack the class in interesting ways, using the new technology and educating me toward new developments in technology … So, it’s exciting to work in a field that’s so new and developing that one really never has a handle on the material and it’s really a learning process for the instructor as well as the students (Prater 2011).

Kate Pullinger, who works both as a creative writer for new media and as a teacher, offered a different approach:

an approach that I found can really work with students is if you begin to talk to them about things like Facebook as a writing interface, and how writing in to Facebook is a form of text, and somehow that doesn’t occur to people naturally, that that is what Facebook is, and I found that just going into the ideas of electronic literature via that kind of interface where people are very accustomed to writing on screen can provide a really eye-opening moment for people (Prater 2011).

By contrast, Joseph Tabbi, a teacher of literature and editor of electronic book review, emphasised the non-linear component of electronic literature, and its usefulness when discussing non-traditional narrative:

One thing I would say is that the notion of flash points, of a sudden connection – it’s a nice metaphor, because it’s electronic, of course – that’s the way that meaning’s made, and one flash point for me is when I understood that you don’t need narrative, and you don’t need story to have meaning. Connections, juxtapositions, layerings – wherever they happen, that’s what gives you the most powerful meaning, even if you’re reading nineteenth century fiction (Prater 2011).

Other instances of flash points

Hayles is, of course, not the first to expound upon breakthrough moments in teaching. Such moments are referred to by many names, but what they all have in common is the resort to metaphor. Barndollar, to take one of a myriad of examples, encapsulates the complexity of both the flash point moment and the accompanying need for metaphor:

the feeling so many students have when they hear an explication of a text they have read but not understood well: it feels as if the dawn breaks over them, or a wave comes down on them, or some other pertinent metaphor that describes the feeling of illumination and revelation of seeing something that was right there in front of them, if they only had the perspective to see it ‘correctly’ (Barndollar 2003: 4, emphasis added).

Metaphors for creativity have also long been present when discussing the subject of literature, the most famous (and perhaps over-used) being TS Eliot’s analogy of the catalyst. It is interesting to note that Eliot’s analogy is explicitly scientific, borrowing from cutting edge sciences of his time, in the same way that Hayles’s metaphor mirrors current theoretical research within the neurological sciences. Eliot invites his reader
to consider, as a suggestive analogy, the action which takes place when a bit of finely filiated platinum is introduced into a chamber containing oxygen and sulphur dioxide … When the two gases previously mentioned are mixed in the presence of a filament of platinum, they form sulphurous acid. This combination takes place only if the platinum is present; nevertheless the newly formed acid contains no trace of platinum, and the platinum itself is apparently unaffected; has remained inert, neutral, and unchanged. The mind of the poet is the shred of platinum (1921: 12).

Eliot describes a fundamentally neurological process, involving emotions and feelings, and the calling forth of infinite combinations of both from the poet’s mind in the act of creating verse. While such an analogy inevitably implies a value judgement – namely, that a very small number of ‘great’ (male) poets are able to do so with success – it is nevertheless an example of an attempt to describe a certain kind of mental process from the perspective of creativity.

In another context – photography – Roland Barthes’ notion of punctum provides an interesting analogy for what a flash point can be. In his last book Camera Lucida: Reflections on Photography (1980, translated into English 1981), Barthes establishes a distinction between the phenomenological experiences of what he calls studium and punctum. The former is the expanse of the field of photography, the way photographs figure in our culture and how we receive them. The punctum, however, has proven to be very attractive to scholars of media, and photography in particular, for the way Barthes seized upon that moment when something in a photograph ‘rises from the scene, shoots out of it like an arrow, and pierces’ (26-7) the viewer. Further, Barthes argues that this moment of punctum, of puncture, is not something that resides in the photographer’s intention, nor is it the functions of the photograph (to inform, represent, surprise and so on). Those are all in the realm of studium, for Barthes. The punctum, by contrast, is a highly individual, a moment of the unplanned, the unintended, and, ultimately, the highly private nature of the experience. Transposing Barthes’ discussions to a teaching context, although possibly a move that does some violence to Barthes original discussion, we find the idea of the punctum to resonate with the flash point in that it reminds us of the difficulty to plan for those moments of insight or private, deeply felt experience (negative or positive) on the part of both students and teachers.

The flash point as a metaphor for creativity

We have picked up on what is essentially a term used in passing in Hayles’s book and given it status as a metaphor for moments of creative inspiration. Admittedly, the flash point is an isolated instance of anecdote in Electronic Literature. However, we would like to consider this anecdote, together with the use of metaphors such as flash points, as moments of revelation, failure or success within creative or pedagogical practice. Before we can reach any conclusions about flash points and electronic literature in pedagogical settings, however, it would be useful to examine our own teaching practices and to then reflect upon our own experiences. To do so, we will use anecdotes of our own experiences in order to highlight in a practical setting what a flash point can look like. The argument can be made that an individual teacher’s
viewpoint is just as likely to be constructed via anecdote as evidence. While a thorough discussion of anecdotes is beyond the scope of this paper, Stock presents a view of the anecdote that is sympathetic to the *ad-hoc* nature of teaching. In Stock’s view,

> What is not generally recognized are the functions that the shaping, reshaping, and rehearsing of anecdotes play in the research we informally and – I would claim – systematically conduct into our practice (1993: 184).

Contrary to Salvatori’s point of view as a scholar of pedagogy, and her necessary warning note about the danger of teacher talk turning into talk ‘about teacher’ (2002: 301), Stock’s defense of the anecdote is spirited and grounded in the everyday practicalities of the classroom teacher at the front-line of the education system:

> Teacher talk has often been denigrated as just another form of gossip: teachers’ lounge prattle, post-class complaining, recitals of old ‘war stories’. Teacher research is often brushed aside as merely anecdotal: robbed of value because it is occasional and rooted in occasions; not worth noticing because of its peculiarity. My argument for teacher talk, the power of anecdote, the importance of narrative in educational research rests in just these characteristics: in their very occasionality, in their very particularity (1993: 186).

With this argument in mind, we turn now to a discussion of our own teaching experiences.

**Instances of flash points in individual pedagogical practice: Maria Engberg**

From 2005 to 2008, I taught a course in Digital Multimedia Poetry at Blekinge Institute of Technology in Sweden, a course which quickly expanded in scope to include born-digital literary arts in general. The course was an elective in a humanities-based undergraduate program called Literature, Culture, and Digital Media, and an important focus of the program was a creative and critical blending of theory and practice. The course aims included studying the multimedial nature of the digital literary artifacts, and how image, text, animation, video, interaction and so forth are composed to make poetic meaning and aesthetic experiences for the reader/viewer. In addition to familiarising themselves with works of the genre and studying the theoretical and methodological literature available, the students were asked to produce a creative piece in a format of their choice.

Over the four iterations of the course, I revised the reading list and the form of the assignment to reflect shifts in the field as well as technological developments. In particular, the growing number of digital media tools that we included in the program, and the students’ own experience with creating multimedia artifacts, made the creative projects more ambitious over the course of the years that the course was offered. As Jacob Nielsen reminds us, one of the main features of any creative process is iteration. In programming or interface design, iterative design processes are thought of as processes of essentially trial and error, with multiple stages of testing in order to enhance usability of the interface (Nielsen 1993). Again, the notion of iterative development is not foreign to a teacher, although it may be intuitive and untheorised.
What one is looking for then, as a teacher, is that moment of testing out the particular didactic framework, the assignment or class format. I found myself searching for any sign of failure or success in the students’ reactions as the class was running, rather than merely waiting for the obligatory final course evaluation, at which point it would no longer be able to serve as inspiration for improvement for that particular group of students.

In 2004, since I was new to teaching creative practical assignments, I was eagerly looking for ways to improve along the way – iteratively as it were. At the time I did not realise that I was looking for those flash points in the classroom, and I could not have imagined that they would be so hard to come by. In my first round of the course I asked my students to read Michael Joyce’s *afternoon: a story* (1987), a seminal hypertext composed in Storyspace, a hypertext system created by Jay David Bolter and Michael Joyce himself. *afternoon* is created as a series of text nodes with an intricate system of hyperlinks that requires the reader to find a path through the textual space in which many reading paths are possible. For readers unfamiliar with this kind of literary work, the reading experience can be frustrating, as it can encourage the reader to foreground the navigation: the clicking. And, indeed, my students became very click-happy users of the text more than readers of it.

This was a negative realisation for me, and it forced me to think about how to make the students engage more fully with the entirety of the work. My answer at the time was to ask the students to write their own hypertext to make them fully aware of the various compositional elements of writing a hypertext. I had myself taken a workshop on writing and composing hypertexts with Michael Joyce and Carolyn Guyer in 2003, an experience which taught me the difficulty of truly engaging with the complexity of word-and-image relationships or, as in *afternoon*, the creative potentiality in constructing relationships between nodes of text. The flow and rhythm of the texts, and the sequentiality of the reading (not only the parsing of individual text chunks and the clicking from one node to the next) as a multimodal experience were all elements that I had begun to engage creatively with in the workshop but was now trying to present from the other side, as pieces that the students could use to create their own hypertexts.

Ultimately, I was trying to set up the framework for the kind of punctum-moment, to use Barthes’s notion of that unexpected moment, ‘that accident which pricks me’ (1981: 27). I had had such a moment myself during the workshops when I realized that the images and words I were putting together in short strings were suddenly and organically making a whole much larger than the sum of the pieces. The students went to work with much interest and energy with the images I offered them to work with. The assignment was to use the images and write texts to them and, finally, create a hypertext. Looking back at the results from the assignment, and the juxtaposition of the very accomplished work by Joyce and the fledgling compositions of my students, I draw a number of conclusions.

The first is that reading *afternoon: a story* before the creative assignment both emboldened and hindered the students’ own creative process. It was inspiring because students had an interesting work to inform their own process, but it hampered them...
because they also conveyed their own shallow reading process of the work into their own creative process, leading them to concentrate on form rather than the interlinking of form and content. This first conclusion constitutes my own minor flash point of understanding that the sequence of the class had had major implications. I had put too much trust in the students’ ability to reach an accumulative moment of insight at the end of the course once they saw the ‘whole’. The second conclusion is arguably more important, as it concerns the students’ own flash points. During the design process and the subsequent presentations of their work in class, most commented metacritically on how manipulating and handling the digital materials – the code, the imaging software and so on – had made them more aware of how material and visual conditions prompt and form particular reading processes, and readers. They came away from the experience knowing that they needed to work with digital media as well as read about them in order to grasp how digital literary artefacts construct systems of signification in which the reader is an active participant.

We came away from the experience shifting our vocabulary from reading to experiencing, and from writing to composing. For me, the shift in vocabulary prompted a pivotal moment of personal realisation that the vocabulary formed by print did not sufficiently address the multimodal digital literacies we were engaging in. Although words such as ‘read’ and ‘write’ are still valid, the creative processes that the students are actively working with in digital media reveal a more complex landscape of signifying practices.

Instances of flash points in individual pedagogical practice: David Prater

In 2007, I taught a course in Creative Writing and New Media (subject code HAM422, which I will use to refer to the course below) at Swinburne University of Technology in Melbourne, Australia. My official job title was tutor/workshop convenor, but I was responsible for updating the existing course outline and had some freedom to deliver the course in my own style. An extract from the course description, as it appears online, reads:

As new electronic modes of writing develop, new opportunities for creativity and expression also arise. In the context and framework of cultural convergence, this unit allows students to experiment with possible paradigms for writing in a hybrid environment that incorporates online and fixed, distributable media (CDROM/DVD), installation and traditional print publishing. In this unit students will be introduced to the possibilities for creative writing and expression associated with new media technologies. Students will gain experience in writing and publishing in a range of media (Creative Writing and New Media 2007).

The course was structured as a workshop, with a dozen students meeting once a week for three hours, for a total of twelve weeks, in a computer lab on campus. The course comprised class readings, discussions and exercises, with the second half of the course reserved for students to work on a group project. Assessment was based on attendance, participation and the quality of the project submitted, with students graded on a pass/fail basis.
Like other courses in literature, HAM422 involved a set of readings students were expected to complete before class, as well as a series of exercises to be completed during and after class. The bridge between these two pedagogical elements was the freewheeling discussions we had in class time. These discussions led to some very interesting breakthrough moments, whose significance and value might not be readily captured by quantitative survey methods but which, in my opinion, were valuable for both the students and myself. It seems almost inevitable that a course on creative writing and new media needs to expose students to writing that actually engages with networked technologies. For this reason, rather than ask my students to wade through textbooks and readers on new media theory (although we did in the first weeks briefly discuss such texts), I instead asked my students to read a text by Australian code-poet Mez Breeze. The piece we read was first published as part of a forum entitled ‘Off With the Page’ in the Australian (print) literary magazine Meanjin.

The piece, ‘NET.WURKING AN ACTIVE DISCOURSE’ dwells, as its title suggests, on issues related to networked technologies and the place of the writer and coder within (or against) such technologies. The piece is written in Breeze’s distinctive style, in what might be described as ‘broken code’, a textual technique appropriate to the discussion but also somewhat challenging for my students. Having been asked to read the piece before coming to class, the students arrived, some of them looking slightly flummoxed. Several mentioned that the piece made no sense, was a jumble of garbled code and defied interpretation or engagement. Having already discussed hypertext and HTML coding in the first class, and completed an exercise that asked the students to view the source code of any web page they liked and to create a code poem from the results, I had expected the students to ‘get’ the gist of Breeze’s text immediately. Perhaps arrogantly or even in an act of faith, I had also hoped that the breakthrough would occur immediately, like a revelation. Instead, I was faced with my students’ puzzlement. Realising that I had scheduled three hours to discuss Breeze’s text, I made a decision: we would read the text aloud, taking it in turns. The ‘flash point’ then occurred as the students stumbled over and eventually made sense of the text, both by reciting the broken code aloud and listening as others tried to do the same. At this moment, the point I had been trying to make about ‘reading’ and the nature of electronic texts became apparent. To (perhaps mis)quote Bourdieu: ‘Reading, and a fortiori the reading of books, is only one means among others, even among professional readers, of acquiring the knowledge that is mobilized in reading’ (1993: 32).

While setting up the class blog, I posted a link to Breeze’s website. I also linked to her work in the blog post about this particular class reading and exercise. Several days later, we received a trackback on that blog post, from the author herself. The second flash point occurred when the students, slightly shocked, realised that what they were doing was visible to others on the Internet.

What does this anecdote have to do with electronic literature pedagogy? Firstly, while it definitely constitutes anecdotal evidence of method rather than explorations of rigorous scholarship, it does gesture towards some of the tensions that exist between various elements of the academy, and between theory and practice in relation to the teaching of creative writing. Even the title of the course – Creative Writing and New
Media (my emphasis) – points to a wishful desire to synergise teaching methods appropriate to a creative writing class as taught in the university system (that was in my mind, as part of an English or literature major) with kinds of scholarship and practice more closely aligned with Multimedia, Cultural Studies or even Sociology. This, arguably, suggests that artificial distinctions between disciplines are not always helpful when reflecting on pedagogy, especially when it comes to the teaching of electronic literature or related genres.

Also of relevance is the creative potential of the classroom as a working laboratory for creative communities and collaboration. Throughout the course, theoretical and critical material was used in service of the goal of creating of new texts in a variety of media. The substitution of ‘Critical Analysis’, ‘Close Reading’ or ‘Technical Production’ for ‘Creative Writing’ in the course’s title would naturally change its entire nature, including pedagogical methods, teaching styles and reading lists.

**Conclusion: Multimodal writing in the digital age**

The shifts in literacy that digital media have brought in the last decades have recently been re-energized in popular and academic press as writers claim that our deep everyday engagement with digital media is having detrimental effects on how we process information and accrue knowledge. Nicholas Carr, in his jeremiad about the internet’s general effect on literacy (2010a), argues that as the printed book goes the way of printed newspapers, the e-readers and tablets that take their place will fundamentally change how we read and engage with texts because of e-readers’ ability to be networked, and enhanced with images, video, audio. Carr’s fears are that networked computational media, even a Kindle, shatters the linearity of the printed book, along with what he calls ‘the calm attentiveness it encourages in its reader’. Carr is reacting to the ‘late age of print’ (Bolter 1990), in which print no longer has the uncontested central position for knowledge storing and distribution, but he is also ignoring literary works that do not just offer written texts asking for calm attentiveness, such as digital literature. Carr argues that ‘the Internet is an interruption system. It seizes our attention only to scramble it. There’s the problem of hypertext and the many different kinds of media coming at us simultaneously’ (Carr 2010b). Within this context, networked digital media require a set of skills beyond mere reading and writing, and this becomes abundantly clear when teaching digital literature that foregrounds multimodality and multiple modes of reception.

Our contemporary media landscape offers various modalities for the consumption and creation of media. Students’ greater participation in social media will, we argue, change fundamentally the practices of teaching and learning. This was again confirmed, to a certain extent, by the interviews with writers and scholars mentioned earlier. When asked what kinds of skills a teacher of electronic literature needs, and in what respects these skills or skill sets might be different from those of teachers in other disciplines, the interviewees focused on finding ways of learning how to teach with new technologies. The new forms of connectivity, which appear still to be a novelty for both students and teachers, offer a myriad of possibilities for pedagogy. As Kate Pullinger stated:
Well, I think you need to be open to new ideas, and I also think you need to be unafraid of technology and technological possibilities, and that you need to be interested in the idea of the network, and the idea of connectivity and what that can bring to writing, what that can bring to storytelling (Prater 2011, emphasis added).

Jay David Bolter approached the familiar (if over-constructed) problem of print versus digital as follows:

There’s perhaps a greater need to understand the material dimensions of the digital platform than there was for the printed book - not because the printed book is not a technology, but because we had lived with that technology so long that we had absorbed a lot of tacit knowledge about it, whereas in the case of these new digital technologies … we need to actively learn about them in order to appreciate them and understand what is being done with them (Prater 2011).

Perhaps we can grant the penultimate word to Joergen Schaefer, a research fellow at the University of Siegen in Germany, who admitted:

Well, probably the basic skill is sort of openness for accepting that your basic competences as a literary scholar are not sufficient, so that you must be open to work in a trans-disciplinary environment, and that you must accept that very often you cannot explain anything to students, but that together as a group you have to find out what that might be about (Prater 2011).

In the end, while teachers will always need the ability to identify and interpret flash points in their own experiences of teaching, their ability to also defer to their students’ innovations and knowledge may well determine the extent to which they are able to successfully and creatively navigate the potential of new media learning experiences.

Endnote

1. Developing a Network-Based Creative Community: Electronic Literature as a Model of Creativity and Innovation in Practice (ELMCIP) is a collaborative research project funded by Humanities in the European Research Area (HERA) JRP for Creativity and Innovation. ELMCIP involves seven European academic research partners and one non-academic partner who will investigate how creative communities of practitioners form within a transnational and transcultural context in a globalized and distributed communication environment. Focusing on the electronic literature community in Europe as a model of networked creativity and innovation in practice, ELMCIP is intended both to study the formation and interactions of that community and also to further electronic literature research and practice in Europe. For more information, see http://elmcip.net

Works cited


Barnes, M 2000 ““Magical” moments in mathematics: Insights into the process of coming to know’ For the Learning of Mathematics 20: 1 (March), 33-43


Bourdieu, Pierre 1993 ‘The field of cultural production or, the economic world reversed’ in R Johnson (ed) *The Field of Cultural Production*, Oxford: Polity Press, 29-72


Carr, Nicholas 2010a *The shallows: What the internet is doing to our brains*, New York: WW Norton

Carr, Nicholas 2010b ‘The web shatters focus, rewires brains’ *WIRED* (June) at http://www.wired.com/magazine/2010/05/ff_nicholas_carr (accessed 30 October 2011)

Carr, Nicholas 2010b ‘The web shatters focus, rewires brains’ *WIRED* (June) at http://www.wired.com/magazine/2010/05/ff_nicholas_carr (accessed 30 October 2011)


Hayles, N Katherine 2005 *My mother was a computer: Digital subjects and literary Texts*, Chicago: University of Chicago Press


Nielsen, Jacob 1993 ‘Iterative user-interface design’ *Computer* 26: 11, 32-41

Prater, David 2011 Interviews conducted with participants at the ELMCIP workshop on electronic literature pedagogy, Karlskrona, Sweden, 14-16 June

Roberts, A and Smith, KI 2002 ‘Managing emotions in the college classroom: The cultural diversity course as an example’, *Teaching Sociology* 30: 3, 291-301

Salvatori, Mariolina Rizzi 2002 ‘The scholarship of teaching: Beyond the anecdotal’ *Pedagogy* 2: 3, 297-310


Stock, PL 1993 ‘The function of anecdote in teacher research’, *English Education* 25: 3, 173-87

Vitale, JL 2012 ‘The eureka moment: Embracing the new paradigm of musical sounds through alternative pedagogy and curriculum in the music classroom’ *The Online Journal of New Horizons in Education* 2: 1, at http://www.tojned.net/pdf/v02i01/v2i1-03.pdf (accessed 30 October 2011)