Digital Amnesia and the Demise of a Learning Community

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Abstract

Through presentation of a personal account of the emergence of Education Network Australia (EdNA) in 1995 through to its eventual demise some 15 years later this article uses narrative inquiry to reflect upon a number of critical issues regarding the sustainability of learning communities and of the digital infrastructure that is developed to support them. 'Digital amnesia' is introduced as a construct to describe practices that ultimately led to the disappearance of digital content and services associated with Internet domains associated with EdNA – and hence the learning community associated with it. EdNA's demise is described in terms of squandering social and community capital. The formation of a new entity and services intended to fill the service vacuum has shown little evidence of a sustainable approach or an understanding of the affordances of digital technology, particularly with regards to information stewardship. A number of lingering questions are teased out from the narrative and together represent a challenge for further inquiry.

Introduction

I suppose it could all start with once upon a time. A story that began with a vision of a connected community, of optimism and inspiration, the forging of a new way, a new world that harnessed possibility, of knowledge sharing and learning stimulated by abundance and the emergence of a new, and digitally connected, commons. A story with an intriguing mix of players: Ministers of Education of all political colours; a parade of chief executives, from insightful to self-serving; career bureaucrats with vision and ruthless, myopic zeal; a cadre of technology frontiersmen and women, on a grand expeditionary journey; and, a dispersed but collegiate team of individuals who worked their butts off pursuing a shared dream. Well actually, now that I've said it, that's not a bad place to start! The trouble is, this particular story is more to do with an ending, a betrayal, a failure of advocacy, and the impact of changed economic conditions that allowed a culture of bureaucratic blur to create the fuzzy logic that savings involved in shutting down the gold mine of social capital and networked infrastructure far outweighed any discernible value when, after all, the new digital commons was dominated by far superior services such as Google and Facebook. But in this telling of the story, the villains got their way and the unraveling took place facilitating their own career advancement.

For me, this story began in 1997 while employed as an IT Manager at the University of Melbourne. I was invited to participate in the development of a national project known then as Education Network Australia, or EdNA. This initiative was focused on maximising the benefits of the Internet for the Australian education and training sector through enabling the development of a

collective voice and collaborative infrastructure focused on quality information resources and knowledge sharing. By early 1998, a new national ministerial agency was formed to manage the functions of EdNA known as *education.au limited* and based in Adelaide. The agency commenced its life as a small team of eight professionals. I was appointed as Director of EdNA online services and soon discovered the privileged position of working for an agency whose whole mode of operation was consultation and collaboration with key stakeholders throughout the Australian education and training sector. I have documented the early history of EdNA elsewhere (Mason, 2000a, 2000b, 1998; Mason, Dellit, Trask, and White, 1999) so I don't intend to repeat that here in detailed terms - but what is important for this telling is that the early days were characterised by enormous optimism by the whole team in terms of how EdNA might be developed. After all, it represented collaboration on an unprecedented scale in the Australian education sector with an often-quoted metaphor invoked that the mistakes of earlier generations in building railway infrastructure of different gauges would not be repeated in the digital age. There was much to be gained from information and communications technology (ICT) and the transformation of teaching and learning was well underway, as was transformation of the broader economy in these early, heady days of the dot com boom. Significantly, the initial EdNA Directory Service of 1997-1998 was Australia's first database-driven website in education!

These reflections are documented here not as a way to single out individuals who committed a disservice, but to take the license that comes with narrative inquiry to say something that probably rings true for many former participants of the EdNA learning community. There are upsides and downsides in such an approach – the upside being that the data-centric approach to research underpinning of a lot of academic writing is explicitly avoided; the downside is it can easily be perceived as a rant. So, in pursuing a tried and tested middle way this particular narrative draws upon some documented evidence within an overarching narrative. The focus, however, remains the negative legacies of government-sponsored IT infrastructure, specifically the 'digital amnesia' that characterises a sloppy transition in departmental mindset from supporting infrastructure initiatives to deployment of services. Through discarding the baby with the bathwater the rebranding of government-sponsored digital services in the aftermath of EdNA's shutdown broke the IT infrastructure and failed to recognise the value of a vibrant learning community – of which there were approximately 35,000 active participants at the time of the shutdown (White, Thomas, Weldon, Lawrence, Galatis, and Tyndall, 2013).

EdNA the network and EdNA the service

Over time, the initial EdNA Directory Service became re-branded as EdNA Online for a very strategic reason: it was important to distinguish between the network of organisations, education departments, professional associations, committees, and individuals that comprised the network on the one hand and the functions of an evolving online presence on the other. It also became apparent that the EdNA Directory Service functioned as more than a directory of information and was initially focused on three main functions:

1. A portal and national directory, or who's who in Australian education and training;
2. A repository of educational resources screened for quality and relevance; and,
3. An online collaborative space in which many hundreds of email discussion lists were managed.

A fourth function evolved as almost inevitable in the early years: a contemporary and non-partisan national source on news and events relevant to the Australian education and training sector.

While this represented unprecedented collaboration in Australian education and training EdNA Online was vulnerable in terms of sustainability for two main reasons. Firstly, the committees that were responsible for its overall governance reverted to type (and hierarchical thinking) and were skittish about involving students – this is despite innovative proposals at the time such as building a student portal called echidna (EkidNA). Secondly, the Commonwealth Department of Education (under the auspices of various pseudonyms) had funded EdNA through a fund that needed to be dispersed, managed, and evaluated on an annual basis. In some ways, then, EdNA Online was never afforded the opportunity to become an embedded service and a symbol of systemic change because of the constraints of 'project think' prevalent in Canberra.

As a counterpoint to this vulnerability was the positioning of the peak advisory committee, the EdNA Reference Group, which had been formed earlier in 1995 and consisted of nominees from each of the three sectors – higher education, vocational education and training, and schooling (including representatives from non-government schools). In many ways, the formation of this consultative and advisory group was a master stroke of strategic planning and collaborative infrastructure which set the scene for the formation of a key subsequent committee known as the Australian ICT in Education Committee (AICTEC), which was still in existence up until the Federal election of 2013. Interestingly, it is unclear from its associated website (*aictec.edu.au*) whether the committee still exists. Somewhat ironically, the website presents very scant perspective on its history and little context in terms of dated priorities that demonstrates a culture of ignorance in terms of public information stewardship responsibilities.

Innovations at the cutting edge

Due largely to a workplace culture at education.au limited that 'walked the talk' there was no shortage of ideas for developing the core services associated with EdNA Online and more than once the Commonwealth department sought leverage from the initial implementation. Apart from managing the website through a devolved and distributed administration – that is, directly enlisting the buy-in of stakeholders – one of the earliest innovations was the development and wide adoption of a search API (application programming interface) that enabled copying some code from EdNA Online and using it on numerous other websites to facilitate remote or distributed searching of the central repository. This was achieved before the mainstream search engines did likewise. This approach informed subsequent unbundling of other services from the portal, although there is also an argument that the opportunity to unbundle its services was not addressed until it was too late.

However, not all attempts at leveraging EdNA for the development of online services were successful – the most notable being *edna.com*, an attempt during 1999-2000 in partnership with the publishers of the Australian Trading Post and build a commercial online trading site similar to eBay but exclusively for the education and training sectors. Considerable funds and committee time were invested in this exercise all to no avail.

A number of prominent drivers of change informed ongoing development and the general approach to innovation of the service, such as open source software and open licensing (Leeson & Mason, 2007) as well as the impact of the mainstreaming of social media. The central philosophy of education.au limited thus became very much focused on the design and deployment of "shared services" that contributed value to the "common wealth" (White, 2010; Ivanova, 2004; Mason, et al., 1999).

Probably the most compelling innovation in the latter years of EdNA Online (re-branded to simply *edna*) was the somewhat belated attempt to redress the policy of the early years to exclude students. The service developed as *my edna* and creatively branded using the edu

domain as me.edu.au had enormous potential to build further social capital and embed social networking into mainstream education and training. But the aforementioned career bureaucrats would have none of it.

'Guided' Evaluation

If the practices of government departments that were condoned, even cultivated, at the time took place in the business world then there would have been legal proceedings to follow. In hindsight, what took place could be described in terms of a classic breach of the Trade Practices Act, of 'misleading and deceptive behaviour' masked as an evaluation process that was both commissioned and guided – or in the words of one key stakeholder, "a sham". There was no real consultation with stakeholders who valued the service. Evidence for this is confirmed in responses to an online survey conducted in early 2014 in which 9 out of 10 former employees of the agency believed this to be the case and were not consulted.

It is pertinent to this paper that the documentation involving the evaluation of EdNA now just represents one item of the thousands of public documents that together represent "grey literature" that are no longer discoverable as a consequence of the EdNA shutdown (White, et al., 2013). Moreover, this document is no longer retrievable from the Commonwealth Department of Education website. Unfortunately, such a situation is not unique for websites associated with the Commonwealth bureaucracy partly because of the frequency with which their departmental names (and associated website domain names) change. During the lifetime of EdNA, the Department's acronyms included DEET, DEETYA, DEST, DEEWR, and DOE and there existed many more custom program websites that no longer can be found. Of course, a cynical perception of this state of affairs might see it as politically expeditious to engage in practices of 'digital document shredding' whenever there is a change in government.

Following the public disclosure of sensitive information from whistleblowers in recent years facilitated by Wikileaks and by individuals such as Edward Snowden it is fair to say that the age of surveillance that we are entering is being tempered or challenged by individuals who are incensed by the aggregate unethical actions of government agencies, although actions of these individuals is likewise perceived by some as not in the public interest while for others as courageous. On balance, it would appear that the principles of democracy are proving resilient as recent legislation indicates sentiment toward the whistleblowers. Thus, in Australia for example, the *Public Disclosure Protection Act of 2013* was enacted to safeguard whistleblowers in the public service (Commonwealth of Australia, 2013). It will be very interesting to see whether sham evaluations will continue to be sanctioned in this newly emerging environment!

Where the Network Ends?

Learning communities involve not just individuals as 'members', but individuals with role obligations and affiliations, individuals with multiple belongings who belong to organisations as well as communities of interest, individuals on the periphery – and individuals with diverse opinions. Importantly, networks are intrinsically open – they are not clubs, guilds, tribes, associations, membership organisations, or necessarily even communities. In my years at *education.au limited* I used an email signature with the words "healthy networks propagate" to convey this same idea. Networks are formed in the process of connecting and that is all – there is no requirement to sign up. They are also organisms, however, so they can die.

In its heyday EdNA always attracted vibrant debate, particularly through its initial discussion lists and later through the more developed open discourse of social media. As its online presence evolved from its initial function as a directory service to a resource-based and then service-

based portal it also began to take on a bloated, top-down look and feel. For some active and outspoken commentators – those who engaged in active discussion on a range of IT as well as educational issues – it was also perceived as being architected on closed rather than open principles and was criticized for it (Blackall, 2005). For anyone wishing to do a forensic audit on these discussions they will likely find that the negative perceptions of EdNA provided the kind of validation needed for those who wanted the online services decommissioned. It is also worth noting here, however, that debates about what constituted openness were also quite prevalent at the time between the open standards development communities, who were driven by the goal of achieving IT systems interoperability, and open source communities, who were driven by the wish to share code (Schwartz, 2003; Microsoft, 2003). Since then, discourse concerning the expanding "open agenda" in education has continued (Leeson and Mason, 2007).

Makers and Takers

In the network game there are makers and takers, and much of the social capital created for EdNA was the result of a balance tipped toward the former – passionate, active networkers creating pathways of value through the evolving digital infrastructure to support learning networks. In the process of fostering EdNA online communities the social capital generated was in the form of things like conventions and protocols for communication and knowledge sharing; development of trust and respect; project and program content; and a shared identity or sense of belonging.

Over time, *education.au limited*, progressively morphed from an agency focused on EdNA into a convenient outsourcing service for project management on behalf of the Commonwealth Department of Education (under various titles). It became an agency that managed multiple projects, some of which evolved into successful services such as the careers-focused service *MyFuture* – and some grand experimental failures such as *edna.com*, an attempt at creating a commercial market place a little like eBay exclusively for the Australian education and training sector. This shift in function to managing projects rather than building systemic services arguably became detrimental to the ongoing prospects of EdNA – indeed, to the lifespan of the agency itself – because it thwarted any possibility of embedding systemic change despite the overwhelming evidence of the latent potential value for it. Thus, the days for *education.au limited* as an effective broker of collaboration in the education sector became numbered. This is not the place to propose an analysis of all the reasons why partly because this vulnerability is perplexing given that the economy was awash with funds from the mining boom; moreover, related initiatives such as *MySchool* and development of the national curriculum were gaining traction.

A Shared Vision

For the initial distributed collection of supporters EdNA's value proposition was clearly as a meta-network connecting many different kinds of stakeholders within the Australian education and training sector (Mason, 1998; Mason et al., 1999; Mason, Adcock, and Ip, 2000). While the demise of EdNA might be explained in a number of ways it is relevant here to also consider what it still means to some of those stakeholders who were active participants.

> *All in all, the pioneering work of a large number of professional educators, educational leaders, researchers and experts has been lost to posterity, research and historical analysis.* (White, et al., 2013, p. 105)

As an exercise in validating my own reflections I also designed a short online survey in late 2013 and circulated it to ex-education.au limited employees. It was not intended to be a robust research instrument that might reveal irrefutable data but rather something that might just feel the pulse of key participants some years in EdNA's aftermath. From a dozen responses, all within a week of posting the request for input, the following remarks are typical:

Respondent 1: The outcome of the review seemed to have been determined before it was performed. It was a sham.

Respondent 2: Like many, I was disappointed at the apparent short sightedness of whoever made the decision and disregard for both the community and the value of the knowledge and content in edna.

Respondent 4: I don't think they were aware of how useful the resource was to the teacher in the classroom.

Respondent 6: I was not surprised [it was decommissioned], as we had seen it coming for a long time. I was very saddened both for myself (I lost one of the best jobs I have ever had!); for my team (it was hard to see such a passionate, committed and talented team all lose their jobs); and for the users and potential users. I know that some aspects of edna had not kept pace with the times but believe that it could have been strengthened and revived.

Respondent 7: What a wasted resource.

Respondent 8: Shame for Australian education.

Sustaining Digitally Enabled Learning Communities

Learning communities manifest in various forms and some endure while others do not. The first ever online learning community was formed in 1985 and known as The WELL (or the Whole Earth 'Lectronic Link). While originally a bulletin board this online learning community quickly became a benchmark for many subsequent 'virtual' communities. It still exists today, partly as a consequence of transforming into a subscription-based forum and partly because of its policy of non-anonymity and the fact that many of its members are well-known, such as Howard Rheingold. A question arises here: if the WELL could do it, why not EdNA? It might be easy to respond that it was because public money and politics were involved. However, there are plenty of examples to the contrary – a prominent one being the JISCmail communities in the United Kingdom (UK) which has hosted thousands of email-based discussion groups that commenced over 20 years ago. JISCmail was originally established through the UK higher education funding agency, the Joint Information Systems Committee (JISC), but with government changes over the last decade has evolved into a charitable company now known as Jisc. It also managed to seamlessly take over the function of its forerunner, Mailbase (Foster, 1997; Wikipedia, 2014). Perhaps such a move may yet be possible for a phoenix-like EdNA?

From a theoretical perspective Wenger (1998) describes the emergence of "communities of practice" from a lifecycle perspective:

Learning is the engine of practice, and practice is the history of that learning. As a consequence, communities of practice have life cycles that reflect such a process. They come together, they develop, they evolve, they disperse, according to the timing, the logic, the rhythms, and the social energy of their learning. Thus, unlike

more formal types of organizational structures, it is not clear where they begin and end. They do not have launching and dismissal dates. In this sense, a community of practice is a different kind of entity than, say, a task force or a team. (Wenger, p. 96)

This linking of community with learning is informed by the earlier work of Lave and Wenger (1991) and has been regarded as seminal in introducing ideas that connect culture and community with learning (Storberg-Walker, 2008). Historically, the discourse on communities of practice also emerged at a time when online communities were becoming established, and with the invention of the World Wide Web soon became embedded in the discourse and practice of digitally-enabled teaching and learning, particularly in higher education. Certainly, a search on Google Scholar will reveal that Wenger's works have in excess of 70,000 citations.

While Wenger's work can be shown to resonate as true for many participants of online communities other theoretical perspectives are also worth considering, particularly in relation to group dynamics. For example, in 1965, Tuckman introduced the 4-phase model of group dynamics, "forming, storming, norming, performing" which was later updated (Tuckman, 1984) to include a final phase, "adjourning", similar to Wenger's notion of dispersal. Despite the utility of such descriptive terms it is also arguable that an assumption is masked here that groups or communities necessarily have finite lifespans. But do they? Assuming so does not explicitly recognise the role of culture or that a learning community might be sustained across generations. A pertinent example in Australia is the resilience of some Indigenous knowledge over many millennia. If it can happen in such contexts, why not online?

A Failure of Advocacy

In an interview with Bernard *Lane of The Australian* in July 2011 I was quoted as saying "The demise of [EdNA]… represents a failure of advocacy at all levels." What I meant at the time was that no-one publicly stepped forward to advocate for continuity of the service – not the Board, not the CEO, not the passionate employees, not AICTEC – in fact, no visible beneficiary of the service, and certainly not me! The question then, is why? For my own part, having journeyed into 'independent' consulting I had learned quickly that any criticism of funding agencies would not be wise; and, a public coming out at the time berating the department would have brought an immediate stop to any future consultancy prospects. Perhaps in a similar way, other stakeholders felt likewise compromised – such is the impact that changes in political winds have. While the writing was on the wall for change the deeper problem was that no-one seemed adept enough to prevent the baby being dispatched with the bathwater.

So, while it is easy for embittered former employees to claim there had been little or no consultation during the evaluation, it is arguably more significant that there was no public debate and no evidence of the kind of advocacy that existed during the earlier vision and actualization phases of EdNA. Another explanation, in terms of natural lifecycle, is that EdNA had reached a "disintegration", "adjournment", or "death phase" of its learning community despite its high usage and participation (CIEL, 2011; Iriberri and Leroy, 2009; Tuckman, 1984). In the lifecycle perspective it is typical for an online community to move from maturity to dispersal due to lack of contribution or participation; however, in EdNA's case this was not so. EdNA's case, it seems, was more subject to the politics of sustainability. Yes, it was abundantly clear to employees of *education.au limited* that funding for both EdNA and the agency would come to an end – but there did not seem to be any evidence of discussions or consultations as to how the service might be alternatively sustained, apart from a few fanciful conversations over coffee.

Hand in hand with this failure of advocacy is a stark irony: one of the key policies of the Rudd-Gillard governments of 2007-2013 was the *Digital Education Revolution* (DER). In practice, what this meant was a range of programs focused on digital technology access in schools, such as laptops for students and specifications that focused on software systems interoperability. But the implementation of this policy meant very little for EdNA or how it might be leveraged – demonstrating perhaps how the DER, like EdNA, was just another 'project' to be managed only according to its own terms of reference. Project think, however, does not segue easily into a revolution.

Impermanence and Digital Amnesia

While document shredding is both a common and legitimate practice in situations such as protecting identity or privacy it is also a well-known practice that when governments change it can be used as a political maneuver to hide secrets, or just to make life difficult for the other side. Digital technology provides new affordances for how this can occur, although it is generally the opposite situation that gets media attention. In conducting a Google search on "digital impermanence", for example, the exact opposite term is suggested and populated onto the page of responses, namely "digital permanence" – a term used to caution people about their social media postings that will 'remain forever' and possibly hamper future job prospects.

A search on the term "digital amnesia" also reveals a broad usage. Commonly, it is used as a synonym for "digital obsolescence" when the pace of technological changes renders some digital formats inaccessible (Wikipedia, n.d.). But, it also describes: personal forgetfulness that arises from having to manage numerous passwords and locations where personal data might be stored (Urban Dictionary, n.d.); broken hyperlinks or "link rot" (Australian Library and Information Association, 2005); the loss of access to government information (Missingham, 2005); and, the loss of access to large amounts of personal data as a likely consequence of cloud-based suddenly closing down. Thus, as Grobman (2013) puts it "One day it [digital content] could all disappear because these companies [e.g., Facebook, Flickr, Wordpress, and Google] are not obligated to give back all of your content if for some reason they fold."

While all these various usages of the term can be meaningful the intended function in the title of this paper has been to invite inquiry as to what it might mean. Based on the foregoing narrative than a number of interpretations are plausible; however, the principal reason for using this term has been as an apt description for the online services and learning communities associated with EdNA which no longer operate with their digital presence having been erased from the collective digital memory of the Web.

The Lingering Questions

In the spirit of inquiry and not just storytelling this paper has set out to highlight some questions arising from the deployment and subsequent closure of EdNA. These questions are not only pertinent to the documented history of EdNA but have relevance to government-sponsored digital infrastructure in general and for the sustainability of digital infrastructure that supports digital learning communities.

- Why is all the so-called "grey literature" (national reports, white papers, discussion papers, etcetera) hosted by EdNA no longer discoverable on the web?
- Is it too late to retrieve components of EdNA given that the broader social and political context has shifted toward one where there is now significantly more public accountability?

- How can Commonwealth agencies be better held to account?
- How can the durability of URLs associated with government agencies and programs be ensured?
- How can the debilitating effects of 'project-based thinking' be countered, or at least balanced, in the expenditure of public money?
- What were the real agendas behind why such an iconic service such as EdNA had to be shut down?
- Why was there a "failure of advocacy at all levels" for maintaining EdNA?
- What lessons can be drawn from this account of the demise of a significant learning community?
- In what ways can nationally relevant digital infrastructure be developed in the future that safeguard the digital footprint of services for future generations to discover and reference?

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