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### **Breaking the hierarchy – democratising the institutional web space**

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#### **Abstract**

This chapter, inspired by direct experience from working on the development of the University of Sussex's Student Personal Learning and Social Homepages (SPLASH) project, discusses how 'Web 2.0' technologies can be used to make institutional websites more democratic. The SPLASH mashup project was non-typical in that it intended to create an environment which would be fully customisable by the learner, so that no content was obligatory. Examples from working on this project are used to illustrate benefits which can be gained from, and barriers to the uptake of, more open publishing methods and an organically structured site architecture. Issues affecting learners, tutors, the institution as a whole, and how the power dynamic between all three may change, are discussed. Parallels are drawn between teaching methods online and those offline, both traditional and modern.

#### **Keywords**

Democracy

Web 2.0

Free speech

Folksonomy

Community

Networks

Collaboration

Copyright

Intellectual property

Government

#### **Introduction**

“Learning culture is but a slice of culture overall, and people are becoming more important than institutions in all facets of life. Command and control of organizational structures are giving way to democratizing networks. Learners, workers, all of us make decisions we previously would have taken to authorities for approval.” (Cross, 2008)

This chapter will draw on experience gained through the development of the Student Personal Learning and Social Homepages (SPLASH) project at the University of Sussex, which was funded by JISC under the User-owned technology demonstrators strand (Granter, 2008). Challenges faced by the project included managing negative institutional attitudes towards critical content being published by students against the University, misconceptions such as improved online communication being thought to increase plagiarism, fears of defamation, fears that personalisation of the learning environment would damage institutional branding and fears of certain students’ viewpoints offending other students.

This chapter hopes to address these concerns and to deliver logical reasoning around how the benefits of incorporating social media into an institutional website outweigh the risks, and how in spite of any newly visible criticism, moving towards a more open publishing policy online will improve the reputation of the institution, as it will eventually be seen to be more honest and more trustworthy than those with closed publishing policies who operate under a hierarchy of strict editorial control. Allowing students a voice will add to the identity of the institution as one with confidence in its ability to provide a high standard of education and support and as an institution with a ‘nothing to hide’ attitude.

Personalisation of the learning environment addresses the power imbalance in education, improving the ability of students to learn from each other, thereby putting some power into the hands of the students. Giving students more choice over the content they receive from the institution in turn puts extra pressures on the institution to provide useful and interesting content; furthermore, the feedback available in the form of usage statistics will put major pressures on different institutional units to perform to a high level as they compete for attention and space. Thus, within the context of a history of corporate control of information, projects aiming to create democratic personalised learning environments are likely to find conflict within the institution itself.

Although the term ‘Web 2.0’ is already beginning to be regarded as a dated term, its use here is appropriate because Web 2.0 describes succinctly a number of theories and tools aligned with a more democratic use of the internet. In the scope of this chapter, Web 2.0 is used to

describe blogging, wikis, forums, user generated content, online communities and social media. 'Social media' here refers to any online tool or space which allows communication and/or collaboration between a number of people, often in a networked environment (Wikipedia, 2008).

### **Openness and utopia**

“Openness is associated with values such as tolerance, individual freedom, lifelong learning, participation, empowerment and cooperation, as opposed to typical closed-world values of command and control, top-down management, centralized and bureaucratic governance, over-regulation.” (Straub, 2008)

Web 2.0 technologies are creating a more democratic web by allowing anyone to publish content, in comparison to the traditional unidirectional flow of information from corporation to user. University websites have previously consisted of institutional information being presented for the consumption of their students, potential students, businesses and all other audiences. A typical University website currently consists of reading lists and lecture notes posted by tutors, promotional information written by its press and communications division, and departmental web content written by authorised web editors. The offline version of this content would be traditional printed prospectus', standard format lectures and the mainstream press.

While collaborative group work and student discussion has been increasingly encouraged in modern teaching, in the form of seminars etc. (Terenzini et al, 2001), it is only in the last few years that the tools have been available which could mirror this more democratic style of learning online. The mainstream press has been opening up its websites via user generated content in the form of blogs and forums (and more recently, rich media (Plesser, 2006)) since the very beginning of the twenty first century - allowing the public to have a voice (Jenny, 2003). University websites seem to have limited the use of Web 2.0 tools to the domain of E-learning, conveniently maintaining complete institutional control over public facing content. Initially conceived as a *social* networking mashup space, the SPLASH project was intended to create more than just an E-learning space – the blogging aspect can be used as a public publishing platform for any purpose within reason. However, creating a very democratic space within an otherwise closed website is not changing the central system, but is the equivalent of creating a co-operative commune in the woods in a city which remains essentially capitalist, when I believe we should be taking steps to build the online equivalent of an anarcho-syndicalist society;

“Anarcho-syndicalists view labour unions as a potential force for revolutionary social change, *replacing* capitalism and the State with a new society democratically self-managed by workers” (Wikipedia, 2008 (my emphasis)).

Instead of mirroring existing societal structures when building the web, we can choose to build it as a new utopia. It is my view that when the utopian model is working online, we are one step closer to achieving utopia offline.

### **Reputation and citizen journalism**

Currently, open publishing platforms such as Wikipedia, citizen journalism sites such as Indymedia and online social networking sites such as Facebook are flourishing, but there are institutional concerns over adopting similar open publishing policies within the context of a university website. Educational institutions in general put a great deal of resources into maintaining their online reputation as a professional institution. New social media sites which allow users to publish their own opinions of products and services, such as GetSatisfaction.com, are seen by businesses to be threatening as they provide the space for criticism which could damage their reputation (Bowles, 2006). E-learning projects hoping to harness the educational benefits of Web 2.0 technology through wikis, blogs etc., are likely to be confronted with barriers to their progress as a result of institutional fears such as these. Individual academics have raised concerns about defamation, which they feared a university-endorsed open publishing platform might facilitate. They understood that the tools on the web could already be (and sometimes were being) used to discuss a tutor negatively – but it was when these same tools were brought within a university website that the content published through them would have to be recognised and dealt with. The only consolation we were able to give was that they could use these public feedback areas to gain knowledge of how they might improve their teaching practice, and in turn respond to dissatisfied students and help them with their issues. Of course this will not be a satisfactory response to tutors who are aware of being unpopular amongst their students.

### **Folksonomy**

“Political centralization... is a relic belonging to the social condition marked by industrial capitalism: a myriad of interdependent industrial productions that require homogeneity in order for there to be the predictability that is necessary for the various manufacturing outputs to be interoperable with one another.” (Cole, 2008)

A strategy similar to political centralisation is generally employed when designing, building and managing traditional university websites. Hence, departmental sections of the whole website must each have a homogeneous semantic structure, not only to ensure that usability is good across the site for the end user, but perhaps because we are currently comfortable with this level of structure and control as it mirrors the structure we see in our institutions, and in our society.

When considering the offline organisation of higher educational institutions, there is often conflict between the opinions of students, lecturers and central administrative teams – each being under different pressures and having different needs from the organisation. Hence, the University of Sussex has had four restructures in seven years, much to the frustration of many staff and students, who feel their needs are not being met (Hodges, 2008). Since the structure of an institutional website is likely to mirror that of the institution itself, restructures inevitably create a massive workload for web teams, who may be positioned by association as having some responsibility for a new, unpopular, institutional structure, because of their technical responsibility to control the website structure. As with many universities, the relationship between the University of Sussex as an institution and the University of Sussex Student Union (USSU) has historically been less than perfect. As a university famous for direct action and its constituency of politically active students, there is often a feeling of scepticism still held by USSU members towards ‘The Administration’. Protest marches on Sussex House, which houses Student Recruitment, the Press and Communications Division, Student Accounts and the Vice Chancellor’s Office, are not uncommon. Increases in fees at a national level, and questions over University finances and management practices at a local level, are often the main causes for protest. In such a time of unrest, and particularly in the culture of protest that Sussex remains in today, it should be seen as courageous of the University to open up any of its public facing web space to its students and staff via post-moderation (ability to moderate *after* content has gone ‘live’ on the site). It is yet to be seen how any moderation will be handled by those authorised, and how those being moderated will respond. The Student Union's Communications Officer was regularly consulted throughout the development of the SPLASH project, and the concerns he voiced were mainly around issues of moderation, privacy and control. Ensuring that the student body felt comfortable using the system we were building was of course very important to the project, which had to balance the desire for the opportunity for free-speech and public debate, with concerns over the potential for bullying and invasion of privacy.

Within any large organisation, there are likely to be recurring disagreements between the central administration and departmental staff over how information on the institution’s

website is organised, i.e. the information architecture of a site. Locally, those closest to a particular area of study with specialist knowledge will naturally want to have as much control as possible over their content, as they feel they are most qualified to organise it. However, central teams have the understanding that organising content in a uniform manner across departments makes browsing easier and is vital for good usability of a website (Tidwell, 2005). There is generally no dynamic interaction between related items of content housed on separate departmental web pages, that is, inter-departmental links where topics or research cross boundaries of categorisation rely on the web editors entering manual links which relies on the web editor being aware of related content elsewhere on the site. There is no opportunity for comment, no automated track-backs for referenced content, no ability to create new links across subjects through tagging. A hierarchy of editorial control operates where trained content creators are guided by web editors who operate under the control of a PR and Communications division.

“Traditional hierarchies with their burgeoning bureaucracies and disconnected silos are typical manifestations [of the closed world]. The rise of social networking sites, virtual worlds, blogs, wikis and 3D Internet give us a first idea of the potential of the “interactive and collaborative web” dubbed Web 2.0. Now we have the infrastructure and tools to operate in new ways in open systems.” (Straub, 2008)

To overcome any power struggle between departments and central teams over information architecture, it is possible to provide multiple ways of navigating content. A consistent top level and secondary level navigation system is certainly necessary, and after consulting departments the central team should be able to create this navigation, the main site map and traditional user journeys. Subject specific content can then be placed into the most relevant areas and categories, using the institutional taxonomy, as is standard with current web Content Management Systems. In addition, to create a parallel and organic navigation option, feedback on the information architecture of a site could come through the use of tagging. The content could be tagged by any individual, which would generate tag clouds made up of subject-specific folksonomies. People within departments may then find it easier to navigate content via these tags rather than the institutionally defined categories. This more flexible and open approach to content structure could also account for changes over time if this affects the way that the information needs to be organised. Fears of abuse of such a system could be reduced via a log-in system so the person tagging is identifiable. Abuses could also be flagged by other users so the system could be self-policing.

In addition, the learning effect on students and staff alike of the opportunity to reorder and recategorise the content they are learning from will not only be through the benefit of awareness of new connections between topics, therefore enhancing the solidification of the contents' meanings in the mind, but will also be through the benefit of rethinking the learning experience itself – to think of it not as an experience requiring institutional *schooling*, but one which can come from oneself and one's community. Attempts at re-educating our society into this frame of mind, where learning outside the framework of the traditional institutional schooling system is validated by all, echoes Illich's calls for “deschooling society”, which is based on the theory that, “Most learning happens casually, and even most intentional learning is not the result of programmed instruction” (Illich, 1970). Returning to the topic of folksonomies and tagging, then, Illich states that,

“The majority cannot and should not be rallied for discussion around a slogan, a word, or a picture. But the idea remains the same: they should be able to meet around a problem chosen and defined by their own initiative. Creative, exploratory learning requires peers currently puzzled about the same terms or problems. Large universities make the futile attempt to match them by multiplying their courses, and they generally fail since they are bound to curriculum, course structure, and bureaucratic administration.”

Illich goes on to envisage a solution in the form of a system which did not yet exist at the time of his writing – a computer network where individuals make contact for the purpose of discussion around a topic chosen by themselves.

### **The knowledge economy**

A great deal has been written about e-government and democracy, mainly with regard to American politics. These studies suggest ways in which Web 2.0 tools could be used to democratise government processes via online referendums and increased discourse between governing councils and the public. In an article on the website Midwest Populist America, Cole uses the well known example of Nature's experiment, which proved the equivalence in reliability of the social knowledge platform Wikipedia to the traditionally produced Encyclopaedia Britannica (Giles, 2005), to support his argument that “radical democracy – a state that is, oftentimes, embodied by Web 2.0 communities – is not only a deontological ideal – a social condition that we should strive to foster, because it is inherently desirable – but a form of social organization that is pragmatically endowed.” He goes on to say that “social knowledge produces knowledge constructs on a scale that supersedes in volume and quality the knowledge built from traditional social institutions, such as the Academe” (Cole, 2008). Although more research is needed to conclusively prove this statement, the initial

studies do seem to support this theory, which is of great concern to those making a career out of their expertise. Historically, science is considered to be closely aligned to a 'pure truth' and proven facts, distanced from opinion and unauthorised or unapproved research. While there should be no reason why theories and hypothesis cannot be created more collaboratively and internationally, using Web 2.0 technologies as a tool to aide this process, the whole culture of academia has grown around peer review, citation scores, and getting published in respectable journals (Henneberg, 1997). When anyone can self publish and non-traditional open publishing spaces become respected, the knowledge economy itself becomes unstable.

In the field of pharmaceutical research for example, open publishing is likely to pose a problem with regard to patents and sponsorships. Where huge finances are required to carry out practical research, methods of production will need to remain under strict ownership of the sponsor. Where there are great financial gains to be made from finding a solution to a problem, collaboration amongst strangers towards a common goal will be rare. In Wallis' review of the SAPIENS project (which was set up to provide electronic versions of Scottish periodicals) he concludes that electronic publishing is "not cost free and a subscription model is necessary to sustain such a service" (Wallis, 2004). Although this is a review of the practice of open *access* to traditional publications and not specifically about *open publishing*, the two are directly related because all or almost all open publishing platforms are used to create freely available (open access) intellectual property (Wikipedia, 2008).

In Web 2.0 culture, original content may be considered more trustworthy than that which has been rewritten by copywriters and editors. In order to self-publish such original content, researchers need tools and training for online publishing, guidance on the different tones of writing to use in different online spaces, and a definitive place to publish to be provided for them. Increasing numbers of researchers are likely to have their own blog or homepage already and this may reduce the likelihood of some institutions recognising the need to provide these services to its staff and students. However, aggregation of up-to-date content (e.g. via RSS) could be seen as a valid method of supporting this content. The opportunity to publish alongside other researchers from the same institution is the benefit, not specifically the provision of a blogging platform itself. Indeed, many researchers will value the opportunity to choose a platform for themselves that suits their needs or is familiar to them. On the other hand, less experienced users may need a platform to be provided by the institution before they feel they can 'trust' the software. Additionally, when an institution aggregates the content of its researchers, it is providing a recognisable badge of approval and authority to the work that a previously independent, self-published researcher's blog could not achieve.

## **Student Personal Learning and Social Homepages (SPLASH)**

The SPLASH project provides a simple blogging platform to users, alongside an RSS feed output display where external blogs can be imported and displayed on a user's SPLASH Profile. A major concern throughout the project was that the user should keep total control and ownership of all of their content, even outside the lifetime of their university membership. To achieve this, the SPLASH project took a very different shape to other Personal Learning Environment (PLE) and ePortfolio projects, by insisting that all content created by the user, except blog posts, would be hosted externally. In the case of blog posts which constituted the only university hosted, user-generated content, a large factor in the project plan was that the blog should be easily exportable into external blogging systems which allow content import such as Wordpress or Blogger. Keeping as much content external as possible means that the user has choice over where their content is held, which goes some way towards giving them complete ownership over their content (notwithstanding external host company terms and conditions – users would still need to ensure that when agreeing to these terms, their ownership rights to their content are not infringed upon). In addition, when the user moves between institutions, although the presentation of aggregated content within SPLASH will be lost, the content itself remains.

The main concept behind SPLASH was that it would have a function similar to an iGoogle dashboard or a NetVibes page, with fully customisable drag-and-drop widgets to bring in information chosen by the user. This constituted the SPLASH 'Dashboard'. The SPLASH user's profile page would also function in this way, but the user would probably choose to put different information here, presumably information about, or created by, themselves – or useful resources they wished to share. They would then be able to choose privacy settings on a per-widget basis, ranging from totally private, to certain classmates, tutors or contacts only, to totally public. This means that the information visible on an individual's profile would vary depending on who is looking at it, and whether they are logged in.

Throughout the development of SPLASH, University members – students, academics and support staff, were invited to give their input into the project's functionality specification. This was done via the student newspaper, the university website, and existing internal e-learning interest group email lists. Although the number of people coming forward to offer their opinion was scarce, through various recommendations, a working group was formed consisting of three academics, each offering access to students in one of their classes, and also

one student union group – the Gender Society. It was important to involve the Student Union and academics in order to have the support of the students and tutors when the project launched – so that they knew they had had opportunities for input and therefore felt some ownership of the project. These 'case study groups' were called upon during initial meetings when determining functionality and design, and again to test the usability of the system when development began. They were also chosen to beta test the system when it initially launched. In addition, open forum presentations occurred across campus at various stages of development of the SPLASH project, some targeted specifically at academics, some at IT support staff and some at students. During these presentations, the progress of the project was discussed and feedback received.

The groups of students chosen to beta test the project were specifically chosen to test a range of different learning situations in order to consider a range of students' needs. Product Design undergraduates were considered likely to benefit from sharing multimedia online, Social Work students spent a lot of time off campus and many were part-time, so we were interested in how SPLASH might help build social ties between students in that group who had fewer opportunities to meet each other offline, Human-Computer Interaction students were expected to embrace the technology and to provide useful insight into what could be possible, and the Gender Society were thought to challenge any preconceptions of identity representation, choice, and privacy, as well as to offer ideas on how they wanted to use SPLASH for organising and promoting a group which was not course-specific.

Although I finished working as Project Manager/Developer on the SPLASH project three months before it launched in October 2008, my successor Hesan Yousif has diligently kept the project blog up to date (Yousif et. al., 2009) so I have been able to follow the progress and launch of SPLASH from outside the institution. However, at the time of writing, SPLASH is still very much in beta mode, having been live for only four months, so it has certainly not yet reached the critical mass of users necessary to test it to its full potential. Although all first year students have been given access to SPLASH this year, extensive marketing and promotion of the system on campus and online is still necessary to engage students until the critical mass of active users is reached. For this reason, my analyses in this essay remain based on the experiences I had first-hand with the planning and development stages of the project, including the varied attitudes to the project that I encountered whilst working towards its launch. In the future, a discussion of the techniques employed in recruiting membership and use of the system, and how successful the system was found after launch, including any effect on learning outcomes, will indeed be useful.

## **Editorial control**

When editorial control of departmental websites is handed to the departments themselves via Content Management Systems (CMS), there can be tensions between the lecturers and departmental administrators who are publishing to a live University website, and between the central administrators and communications teams. Tensions are likely to arise around quality control, tone of voice used online, and branding, as central teams are forced to accept a certain level of loss of control over the University image that is portrayed publicly. Most University websites' content is managed mainly by CMS which allow authorised web editors to maintain areas of the website that are related to their work. This system is still not fully democratic or open because there is often a hierarchy of editorial control over content; becoming a web editor requires training (even when using a CMS) and brings with it responsibilities that many university staff do not wish to take on, and the unidirectional flow of content from the institution to the reader remains. Although this is a step in the right direction in that it transforms the one-to-many model website into a few-to-many model website, the structure of a CMS driven website is still essentially the equivalent of a brochure or prospectus.

For a true many-to-many democratic site to exist, live feedback mechanisms must be embedded throughout the site. In addition, feedback that is submitted and the responses to such feedback should be fully public so that readers can track how each others' complaints and suggestions are handled. Such transparency of customer service via sites such as Getsatisfaction.com has been successful in boosting consumer confidence in a brand for many companies in the private sector. Lessons could also be learnt from the community news voting site Digg.com when developing editorial tools used to promote items as featured articles on a website, i.e. we should consider allowing users to choose homepage content themselves. Not everyone wants to be a content producer, some might just want some degree of editorial influence.

I suggest that on an individual level, the essence of personalised learning is in the autonomous behaviour it facilitates for its users, or else it is not truly personal. However, on an institutional scale, all structure and organisation need not be lost to anarchy. Gannon-Leary & Fontainha (2007) point to the need for leadership, in the form of a moderator for example, in order for a community of practice to be sustained successfully: "Stuckey and Smith (2004) argue that there are identifiable features to a successful CoP, and most importantly the ability

to sustain the community, the chief of which is the need for ‘leadership’ which, in the case of a CoP, may be a moderator, facilitator or list owner”. This indicates that ongoing support (in the form of a community moderator) is needed from the institution if an online community is to be successful. How this moderation is put into practice can be a very sensitive issue. It is worth noting that the Student Union Communications Officer who was the SPLASH project's main student representative was, for the first year of the project, also active in the Student Union Autonomous Society (which was not an official society, but was a politically active association of students on campus), and this individual was passionately concerned about the potential abuse of power that the University could have if all students were communicating within a University controlled system. Luckily, that student's successor was considerably more positive about the opportunities that SPLASH could provide for union groups to organise and promote themselves. It is clear from this situation that the political stance of stakeholders can have a dramatic effect on their buy-in to a Personalised Learning Environment.

### **Personalisation and identity**

The need to allow a mixture of social interaction alongside instructional teaching in the same environment, as well as the need for strong identity representation in virtual communities, has been explained by Gannon-Leary & Fontainha in relation to how a lack of opportunity for socialising in a virtual community of practice, and hidden or multiple identities, may negatively affect users' sense of ‘trust’ in that community:

“A fifth barrier involves trust. The virtual CoP lacks the opportunity for face-to-face interaction and socialising which can consolidate group membership. Consequently individuals may fail to engage in the CoP, preferring to work autonomously. Trust building is vital for sharing (Jarvenpaa & Leidner, 1999; Kirkup, 2002; Gibson & Manuel, 2003; Ellis et al 2004) and trust primarily develops through face-to-face interactions. In the virtual environment, identities can remain hidden and members may adopt different personas (Tomes, 2001; Turkle, 1997)” (Gannon-Leary & Fontainha, 2007).

This would indicate that seemingly frivolous attempts to facilitate self expression through an online profile within the community (such as personal profile design themes, avatar choice etc.) are indeed important to facilitating sharing, and therefore learning, within the community, via their effect on solidifying identities online, which in turn should encourage sociability and therefore learning.

The SPLASH project was based around the concept of a wholly customisable networked mashup. Users have a personal dashboard composed of widgets that they choose – none are obligatory. Of the widgets on offer, some are explicitly learning related, containing information specific to that user's academic courses, whilst others may keep the user updated on their personal and social life, for example via a Facebook widget (not excluding the possibility that the user uses Facebook for academic learning). As well as a dashboard, the user has a profile with widget-specific privacy settings, and is automatically networked with course-mates as well as having a user-created network of contacts. When we discuss a personalised learning environment, we are not only suggesting that the user be able to customise layout and design, but that they should be able to choose what content they receive, what content they share, and with whom. In *Designing for Change: Mash-Up Personal Learning Environments* (Wild, Modritscher & Sigurdarson, 2008), the assumption is made that “establishing a learning environment, i.e. a network of people, artefacts, and tools (consciously or unconsciously) involved in learning activities, is part of the learning outcomes, not an instructional condition”. That is, the process of customising one's learning experience, for example through choosing what widgets to put on your dashboard, and by researching and adding contacts, defines these as useful and relevant in the learner's mind – it is an editing and organisational process having a learning outcome in itself.

When it was proposed that users would be able to fully personalise their learning environment, there were fears from some departments that information that they deemed to be important would not reach the students if the students were able to choose the sources of information they receive. At the University of Sussex, different units across the University were eager to push their content at the students via a widget in the SPLASH project, and became uneasy when confronted with the concept that a student would be able to choose to remove their information feed from their online learning space. Indeed, projects which create personalised learning environments such as this will create an extra pressure on institutional units, which will be forced to make their content more engaging and useful for their audience or risk their content being removed by the user. It is assumed by some that extra work will be required to make their content desirable, so staff may be unsupportive of such projects. This indicates a lack of confidence in the value of the content that the unit is providing to the user. If there is a genuine need for this content, then the unit should be producing a high quality resource anyway, so its staff should have nothing to fear. Once implemented though, the result will be higher quality content delivered to the student, as units compete to prove their value.

Another potential effect of allowing such customisation lies in how the attitude to learning will vary amongst students. Students' reasons for being at university will not always include the simple desire to learn. They may be delaying the task of finding employment, or may have been pressured into attending by their parents. They may also simply be there to gain a qualification to improve their chances in the job market. Many students are likely to be at university due to a mixture of any of these reasons. So, the desire of the student to learn will vary, and as such their selection of information that they choose to receive via customisable systems will vary to the extent that it is relevant to (academic, course based) learning. Where previously the content they receive via university web pages would always contain a uniform amount of course based learning material, irrelevant of how interested the student was, giving the student a choice about whether they receive this information at all is likely to result in an exaggerated division between those who are learning (academically) and those who are not, dependent on the customisations they have made. So, whilst those with an existing tendency to be interested in the course-based learning materials are likely to benefit by the customisations and become more engaged with the content they have chosen, those who are not already interested in their course may make customisations likely to further remove themselves from learning materials, becoming further disengaged from their course content. I have based the above hypothesis on theories around new digital technology's effects on the 'reinforcement of existing patterns of political engagement and participation' (Barney, 2008).

“Far from mobilizing the general public, the Internet may thereby function to increase divisions between the actives and apathetics within societies...it is difficult to know how the Internet *per se* can ever reach the civically disengaged” (Norris, 2001 in Barney, 2008).

If this applies to the *learning* disengaged as I have suggested, it could result in a polarisation of students into those who are successful and those who are struggling.

### **Informal learning**

Rethinking the educational experience as something that can happen in any context, not only within the institution, but through other life experiences including work and leisure, is a change in thought demanded from society by Illich in his book, *Deschooling Society* (1970). In *Deschooling Society*, Illich explains how a change of attitude towards education and learning to one which values equally learning experiences outside of the context of the institution, where no certificates or grades are awarded, would deeply challenge the power of the school (or university), and in turn, challenge the power of the whole of modern society. Perhaps it is for this reason that mixing what we might call 'informal learning', e.g. learning

via social interaction between peers rather than by direct tuition from lecturer to student, remains a revolutionary concept to many within the institution, something which may unsettle lecturers and others in positions of authority within a university.

Whilst researching user and tutor needs for the SPLASH project, it became apparent that modern learners felt comfortable mixing the expression of their social online persona with their learning/professional online persona, whilst some lecturers who were attempting to be pioneers of E-learning, were not yet comfortable with navigating these mixed use environments. For example, one tutor came to us with concerns that her students were using a class forum, which she had set up in Moodle for her course, to organise their social activities. For her, this was an inappropriate use of the space and she felt uncomfortable being included in such conversations. However, such use by the students is an indicator that they felt enough ownership of that space to use it for social *as well as* distinctly learning oriented activities, and feeling ownership of the space will have a positive impact on their learning outcomes from that space.

“Lave and Wenger (1991) discuss learning as participation in a social world describing how people learn better in social settings and through social interaction. Virtual CoPs [Communities of Practice] encompass this concept in that they establish a networked environment where the necessary interactions that improve learning can occur (Wenger et al., 2002).” (Gannon-Leary & Fontainha, 2007)

It is possible that when the line between a learning space and a social space is unclear, as in many Web 2.0 environments, those traditionally in a position of authority over the learning space (the tutors) might feel threatened due to the altered power dynamic. In this case, the tutor, in expressing her concern over the explicitly social aspects of the SPLASH project, a ‘Personal Learning Environment’, was basing these feelings on the discomfort she had felt when having to navigate through social behaviour within Moodle, a ‘Virtual Learning Environment’. However, “the PLE approach is based on a learner-centred view of learning and differs fundamentally from the alternative Learning Management Systems or Virtual Learning Environments approach, both of which are based on an institution or course-centred view of learning. ... Important concepts in PLEs include the integration of both formal and informal learning episodes into a single experience” (Attwell, 2008). Therefore, tutors' expectations of appropriate behaviour within a PLE need to be adjusted, which they might find difficult when they are only just starting to be comfortable with the different dynamics within VLEs.

## Conclusions

Clearly, it is not only the tools that are used on a University website that must change, but the entire mindset of the education system. This is likely to happen in a staggered process because many successful case studies of the use of democratic web tools are needed to gain support for an institutional strategy of open publishing. Whilst an initial amount of support is needed to fund projects to develop tools for democratic learning, when the initial tools are deployed, they will struggle to achieve their optimum results because the number of users of the tools has not yet reached the required critical mass – this is the ‘network effect’.

“The network effect dictates that the value of being in the network increases exponentially with the number of participants, or connected nodes to the network.” (Wild, Modritscher & Sigurdarson, 2008)

This is based on the original interpretation of Metcalfe's Law. Although this theory has received criticism in its application to social networks (Briscoe et. al., 2006), Metcalfe has revisited his theory to state that the current model best suited for understanding the value of social networks in relation to their size, has to take into account the *affinity* of members within that network, which would result in a model closer to Chris Anderson's theory of The Long Tail (Metcalfe, 2006). That means that once the critical mass of *valuable* connections has been reached, there is likely to be a 'long tail' dropoff of value added per member as the overall size of the network continues to grow, and also means that the critical mass required for the value of the network to surpass the cost of the network, would be reached more quickly if the network is modelled in a way that maximises opportunities for members to have affinity with one another, for example through socialising, self expression and informal learning activity.

I believe that projects such as the SPLASH project, are working towards providing these opportunities through new social media tools, in institutional web spaces which previously were not open to such social activity. Currently we are in the difficult period where the technology is becoming available yet it is hard to prove its worth to the unconverted without mainstream acceptance and use. One solution might be for pioneering institutions to take the necessary risks and provide the resources needed for such projects to flourish, and to embrace informal learning activity within such systems. The University of Sussex with its SPLASH project, and related projects in the field of personalised learning, have taken the first steps towards implementing these new systems. It is too early to evaluate the effect that the SPLASH project will have on learning outcomes, so this chapter can only hope to inspire further research.

Now that the SPLASH project has been launched and the initial project funding has come to an end, it remains to be seen how well supported the continuation of the project will be by the University itself. These kinds of project need support not only through the technological development, but throughout ongoing maintenance, for community development and moderation. As a forester is required to plant saplings and to prune hedges, so also a manager is needed to ensure a healthy ecology in the ongoing evolution of an online community.

In conclusion, educational institutions need not stop at using Web 2.0 tools within designated online learning environments, as their use throughout an institutional website will benefit the institution as a whole, by improving internal communications and relations. While the move towards an open publishing environment will have to overcome barriers to uptake because of fears of defamation and loss of control, the overall result will be positive as all members of the institution will have ownership of the content and joint responsibility for creating the best possible representation of the organisation, which is in everybody's interests. Whilst the ideal scenario might involve site-wide opportunities for instantly publicly visible user feedback on information architecture, feedback on 'official' content as well as the ability to create user generated content, more people will need to become comfortable with the concepts of a democratic, non-hierarchical authorship model, and this can only come through time and experience with these kinds of environments.

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Note: In accordance with the policy of open publishing and democracy discussed in this chapter, I intend to publish this text on my blog (accessible via <http://bethgranter.com>) which allows public commenting.

More information on the SPLASH project: <http://sussex.ac.uk/splash>

## References

- Attwell, G. (2008). Personal Learning Environments – a new learning concept or a new learning system? In Homung-Prahauser, V., Luckman, M., Kalz, M. (Ed.). *Selbstorganisiertes Lernen im Internet – Edumedia Proceeding*. Retrieved October 29, 2008, from [http://edumedia.salzburgresearch.at/images/stories/4\\_EduMedia\\_Konferenz/Praesentationen/edumedia\\_proceeding.pdf](http://edumedia.salzburgresearch.at/images/stories/4_EduMedia_Konferenz/Praesentationen/edumedia_proceeding.pdf).
- Barney, D. (2008). *The Network Society*, Polity Press Ltd, Cambridge.
- Bowles, J. (2006). Why CEOs Are Afraid Of Social Media. *Enterprise Web 2.0*. Retrieved October 16, 2008, from <http://www.enterpriseweb2.com/?p=77>.
- Briscoe, B., Odlyzko, A., Tilly, B. (2006). Metcalfe's Law is Wrong. *Ieee Spectrum Online*. Retrieved February 22, 2009, from <http://spectrum.ieee.org/jul06/4109>.
- Cole, R. (2008). Review of “Bad for Democracy,” by Professor Dana D. Nelson. *Midwest Populist America*. Retrieved October 18, 2008, from <http://www.midwest-populistamerica.com/articles/review-of-bad-for-democracy-by-professor-dana-d-nelson/>.
- Cross, J. (2008). From Content to Context. In Hornung-Prahauser, V., Luckman, M., Kalz, M. (Ed.). *Selbstorganisiertes Lernen im Internet – Edumedia Proceeding*. Retrieved October 29, 2008, from [http://edumedia.salzburgresearch.at/images/stories/4\\_EduMedia\\_Konferenz/Praesentationen/edumedia\\_proceeding.pdf](http://edumedia.salzburgresearch.at/images/stories/4_EduMedia_Konferenz/Praesentationen/edumedia_proceeding.pdf).
- Gannon-Leary, P., & Fontainha, E. (2007). Communities of Practice and virtual learning communities: benefits, barriers and success factors. *eLearning Papers*, number 5, September 2007. Retrieved October 16, 2008 from <http://www.elearningeuropa.info>.

Giles, J. (2005). Special Report Internet encyclopaedias go head to head. *Nature* 438, 900-901, 15 December 2005.

Granter, B. (2008). Student Personal Learning and Social Homepages. *University of Sussex website*. Retrieved October 26, 2008, from <http://sussex.ac.uk/splash>.

Illich, I. (1970). Deschooling Society, Retrieved October 20, 2008, from [http://www.davidtinapple.com/illich/1970\\_deschooling.html](http://www.davidtinapple.com/illich/1970_deschooling.html).

Henneberg, M. (1997). Peer review: the Holy Office of modern science, *naturalSCIENCE*, Volume 1, Article 2, 1997. Retrieved October 24, 2008, from [http://naturalscience.com/ns/articles/01-02/ns\\_mh.html](http://naturalscience.com/ns/articles/01-02/ns_mh.html).

Hodges, L. (2008). Conflict on campus, *The Independent*, 2 October 2008, 2.

Jenny (2003). Eric Zorn Now Blogging on Chicago Tribune site. *The Shifted Librarian*. Retrieved October 20, 2008, from <http://www.theshiftedlibrarian.com/2003/08/19.html#a4463>.

Metcalfe, B. (2006). Metcalfe's Law Recurses Down the Long Tail of Social Networking. *VCMike's Blog*. Retrieved February 22, 2009, from <http://vc mike.wordpress.com/2006/08/18/metcalfe-social-networks/>.

Plessner, A. (2006). Mainstream Media To Embrace Homegrown Video Uploads: New York Times Newspapers, Conde Nast and Others Take the Plunge. *Beet.TV*. Retrieved October 22, 2008, from [http://www.beet.tv/2006/12/mainstream\\_medi.html](http://www.beet.tv/2006/12/mainstream_medi.html).

Straub, R. (2008). Is the world open? *Global Focus*, Volume 2, Issue 1 (2008), European Foundation for Management Development, Retrieved October 22, 2008, from <http://www.efmd.org>.

Terenzini, P., Cabrera, A., Colbeck, C., Parente, J., Bjorklund, S. (2001) Collaborative learning vs. lecture/discussion: Students' reported learning gains, *Journal of Engineering Education*, 90(1), 123-130.

Tidwell, J. (2005). *Designing Interfaces: Patterns for Effective Interaction Design*. O'Reilly Media Inc., Sebastopol, CA.

Wallis, J. (2004). Facilitating Scottish cultural publishing online, *Library Review*, 2004, Volume 53, Issue 5, p265, Emerald Group Publishing Limited.

Wikipedia (2008). Anarcho-syndicalism, *Wikipedia*, Retrieved February 21, 2009, <http://en.wikipedia.org/wiki/Anarcho-syndicalism>.

Wikipedia (2008). Open publishing, *Wikipedia*, Retrieved October 17, 2008, [http://en.wikipedia.org/wiki/Open\\_publishing](http://en.wikipedia.org/wiki/Open_publishing).

Wikipedia (2008). Social media, *Wikipedia*, Retrieved February 21, 2009, [http://en.wikipedia.org/wiki/Social\\_media](http://en.wikipedia.org/wiki/Social_media).

Wild, F., Modritscher, F., Sigurdarson, S. (2008). Designing for Change: Mash-Up Personal Learning Environments, *eLearning Papers*, Number 9, July 2008. Retrieved October 16, 2008 from <http://www.elearningeuropa.info>.

Yousif, H. et. al. (2009). *SPLASH Blog*, Retrieved February 28, 2009, <http://splashproject.blogspot.com/>.