



ODL COMMUNIQUÉ 61, 1 JUNE 2011

IN THIS ISSUE:

- 1 *Understanding Unisa*
- 2 *Overconnected. Where to draw the line at being online*
- 3 *The F-Word*
- 4 *A free world-class education for anyone anywhere*
- 5 *Providing connectivity to wherever our students are*
- 6 *Planning the first International Unisa ODL conference 2012*
- 7 *The quiet revolution in Open Learning*
- 8 *Cloud computing after Amazon and Sony: ready for primetime?*
- 9 *ODL Repository and blog*

1 UNDERSTANDING UNISA

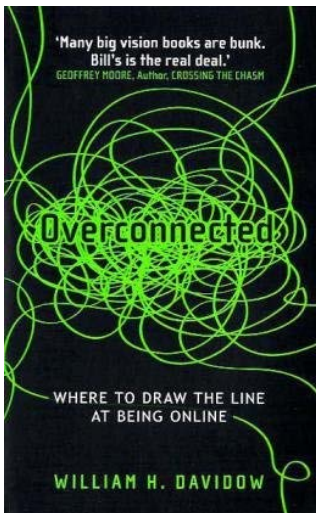
When Unisa was mainly a correspondence institution with no tutorial support and fewer students, it was relatively easy to understand Unisa as a machine with different parts, gears, nuts and bolts. When something went wrong, or a part malfunctioned, it was relatively easy to 'fix' the part, or even replace it.

In an ODL institution with close to 300 000 students, an extensive student support network and many interdependent and interrelated departments contributing to the design and effective delivery of learning experiences; we cannot see and describe Unisa as a machine anymore. (Actually we never could...).

We realise more and more that Unisa is much more than the sum of its different parts. The success of ODL lies in the interdependencies and interrelationships *between* different individuals, different departments and different stakeholder groups inside *and* outside of Unisa. In the past it may have worked for HR or ICT or academics to have called the shots and determined, in isolation, course materials, projects and procedures. We cannot anymore. We should not.

The successful implementation of ODL relies not only on the efficiency of individuals and individual departments, but more importantly, on the interdependencies and interrelationships *between* those individuals and departments. If we don't realise and address these interdependencies and interrelationships we are in trouble.

2 OVERCONNECTED. WHERE TO DRAW THE LINE AT BEING ONLINE



While Davidow (2011: 3) acknowledges that the benefits of a networked age are not in dispute, he warns (alongside other authors such as Carr, N. “The Shallows”, 2010), that we are not conscious “how all of this was affecting our institutions, our emotions, our judgment, and our levels of trust”. Humanity no longer coevolves with their immediate geographical neighbors, but with the whole world (Davidow 2011:5).

Davidow’s claims that the world has become “overconnected” and that there is no turning back. As connectedness increases we are no longer able to adjust (2011: 4). The world has therefore become more “unpredictable, accident-prone, and subject to contagions” than ever before (Davidow 2011:6). In this overconnected world, “the interdependencies spawned by the Internet let problems grow and spread so that the span of government controls, of checks and balances normally built into a system, no longer matches the domain of the problem” (Davidow 2011:7).

Davidow (2011:13) explores different phases of connectivity throughout human history to show how levels of connectivity impacted and shaped human civilisation, relationships and trust. He starts way back in time exploring “what the steam engine can teach us about the Internet”. Steam engines and various other technologies restructured humanity and relationships long before the Internet (Davidow 2011:15).

The higher the level of connectedness, the more unstable systems may become (Davidow 2011:20-21) . This provides Davidow (2011:21-22) with the basis for four different “degrees of connectivity” – ranging from “underconnected”, “interconnected”, “highly connected” and “overconnected”. What distinguishes a “highly connected world” from an “overconnected” world is that in the last state “institutions change so quickly that the environment in which they are embedded is unable to cope. Or the reverse happens: with the increase in interconnections, the environment changes so dramatically that the institutions become overwhelmed by the cultural lag and are unable to cope” (Davidow 2011:22).

Davidow’s (2011:24-25) basis for concern is that the level of interconnectivity incrementally increases incrementally the possibility for positive feedback or reinforcement. “Positive” in this sense does not refer to the inherent “goodness” of the feedback; but rather that an increase of the number of feedback loops over a short period of time, reinforces a phenomenon, whether for the better or worse. Negative feedback, contrary to positive feedback, “tends to moderate, even neutralize, change, keeping environments in balance” (Davidow 2011:24). Positive feedback, instead of “bringing an environment back into balance, ... reinforces and amplifies change, accelerating it rather than reigning it in” (Davidow 2011:25).

“When a lot of positive feedback kicks in via, say, e-mail and instant messages, things can become unpredictable very quickly” (Davidow 2011:26). In an overconnected world, we should therefore expect more accidents and contagions (Davidow 2011:39). Davidow (2011:39) refers to the organisational theorist at Yale, namely Perrow, who claimed that “in highly complex and tightly connected systems, accidents are a normal occurrence, and there is no way to avoid them”. Actually, according to the work of Perrow (referred to by Davidow 2011:39) “adding more safeguards frequently increases the probability that a horrible accident will occur”. The solution is therefore not to built in or to increase the number of safeguards, *but designing less-complex systems*” (Davidow 2011:39; emphasis added).

The Internet has not only increased the possibility of positive feedback loops but also compressed time (2011:42), allowing for positive feedback loops to incrementally increase over shortened periods of time.

Almost halfway in his book, Davidow (2011:48) admits that there is no turning back to a lesser connected world, but that we must learn to adapt. “Most of our institutions were designed for lower levels of connectivity. A lot of adjustments will be needed to accommodate the new environment” (Davidow 2011:48). The basis for the adjustment is the realization that “we’ve built an unfathomably huge number of vital enterprises on top of a densely connected and highly unreliable foundation” (Davidow 2011:54) – mmm, an uncomfortable thought, isn’t it?

Where does that leave Unisa’s drive to design for e-learning? (Also see the article later in this communiqué on the increased reliance on cloud computing).

The ubiquitous spread of Windows operating systems makes us, and everyone running Windows, extremely fragile and vulnerable (Davidow 2011:65).

Standardising one set of protocols – or one piece of software so that it becomes entrenched in governments and the military, in global corporations, telephone networks, utility and transportation systems, and hundreds of millions of homes – creates an environment in which malicious acts have the potential to cause massive economic and physical damage to systems of vital importance to our society and the world. Such standardization means that one malicious piece of software can be created and distributed worldwide at relatively low cost, providing terrorists and criminals with inexpensive weapons of mass social destruction (Davidow 2011:66-67).

This results in the “Mother of All Vulnerability Sequences” (Davidow 2011:66).

Davidow (2011: 71-105) then continues to explore the progress and demise of Iceland as upcoming financial powerhouse – and he proposes that foundational in its demise is the fact that Iceland was “tricked” into embracing the Internet to provide a vehicle for their greed and gullibility. The Internet acted and still acts as “aphrodisiac” (Davidow 2011:115). While financial “booms, busts, swindles, and contagions have been with us for centuries”, the increased interconnectivity has incrementally increased not only the impact of these busts and swindles, but also their scope (Davidow 2011:107). Before providing some pointers for coping with an overconnected world, Davidow states: “The Internet is affecting almost everything we do and nearly every aspect of our lives. We can take advantage of its benefits and beware of its dangers. The key challenge will be to recognise the potential outcomes, guard against the threats, and, when something good seems possible from a positive feedback process, get out of the way” (2011:159).

The high level of connectedness also allows companies and multinational corporations to be “frequently isolated from ‘the society’ they serve. Concerned only with buying and selling, they barely consider possible damage to the community or any service to the common good” (Davidow 2011:184). Companies therefore “move wherever oversight is limited, tax rates low, and laws least stringent, making it possible for corporations to become islands of enterprise free from moral constraints and legal controls” (Davidow 2011:185).

In the penultimate chapter, Davidow (2011:187) tries to pin down some specific responses to the state of overconnectedness. Davidow (2011:187) agrees that we cannot dismantle or even start to restructure the state of overconnectedness. He acknowledges that our options are limited – we cannot “simply reverse history” or lose sight that the interconnected world “offers too many benefits” (Davidow 2011: 187).

Davidow’s (2011:190) proposal then starts with the admission that we cannot make our world 100 percent safe – in this highly complex and interconnected state we are living in, we have “no choice but to accept risk”. If we accept the reality of overconnectivity, there are three things that we can do (Davidow 2011:191), namely...we must:

- “reduce the levels of positive feedback, in order to minimize the accidents that such feedback engenders, the contagions it spreads, and its unintended consequences in general”
- “design systems so that they will be more robust and less prone to failure”
- “acknowledge the higher levels of connectivity that already exist and restructure our existing institutions to be more effective and adaptable”

Is this it, I asked myself?

But worse was still to come... Davidow (2011:191) then proposes that we need to “introduce controls so that we can throttle back and apply brakes that will keep things from racing out of control”. This implies more controls, more regulation and to design systems “differently from the outset, making them more robust and less prone to failure” (Davidow 2011: 201). I found Ghemawat’s (2011) World 3.0 (reviewed in last week’s communiqué) much more nuanced than the rather sweeping petition for more regulation.

Davidow (2011:211-212) closes his book by narrating the evolution of the “polished stone axe” and the impact of its evolution on the Yir Yoront, an aboriginal tribe, that lived for the past fifty thousand odd years in Northern Australia. These polished stone axes, were crafted “from scarce stones, these axes were rare and highly coveted, conferring great stature upon their possessors”. These axes were also powerful symbols of masculinity due to the fact that only male elders were allowed to own these axes. Davidow (2011:212) relates how in the late nineteenth century, missionaries introduced short-handled steel axes to the tribe as part of their attempts to “civilize” the tribe (a notion that Davidow uncritically repeats...). In order to make the tribe more productive, short-handled steel axes were provided to the whole tribe, *including* women (horror of horrors...) and children.

As a result of this well-intentioned act, the Yir Yoront’s social order, over the next few decades, suffered a complete collapse. With the symbols of power diminished by the proliferation of steel axes, tribal leaders lost their authority. Subordinates became independent agents. Trading relationships broke down. Participation in annual ceremonies declined; celebrations lost their joy (Davidow 2011:212)

Summing up the disaster that resulted from the introduction of the short-handled steel axes, Davidow (2011: 212) states that the Yir Yoront’s “entire totemic system, which had given meaning to life and formed the very basis of their society” was destroyed.

Davidow (2011:212) then makes the (somewhat sweeping claim?) stating that the Internet “is a modern-day version of the steel-axes given [to] the Yir Yoront”. Almost in passing he refers to the fact that the introduction of the steel-axes to the Yir Yoront also improved their lives (Davidow 2011:211). In the same way, in order for the Internet to improve our lives, we will need to “accommodate it”. The overconnected world described by Davidow (2011) “is filled with opportunity, but whether we seize it or let it hold us hostage is our decision to make” (2011:213).

The book’s title promised to provide scholarly guidance on “where to draw the line at being online”, and I am afraid, did not deliver on this promise. The book reminded me of the writing of Malcolm Gladwell, although Gladwell is much more meticulous in his claims and analysis. But the book is an easy read – and does provide some food for thought.

In reflecting on the book, I wondered

- How applicable are his categories of the “underconnected”, the “interconnected”, the “highly connected” and the “overconnected” to our staff and students? What are the dangers and potential lurking in each of these categories?
- If we accept Davidow’s (2011) claim that our world has become “overconnected”, how do we prepare ourselves and our graduates with the implications for our relationships and levels of trust?
- If there is no way back from an “overconnected” state to a lesser connected state as Davidow (2011) claims, what are our options in our personal lives and in Unisa?
- With the increased use of a range of technologies in our teaching and learning experiences, what are the implications of designing curricula and pedagogies to encompass “underconnected”, “interconnected”, “highly connected” and “overconnected” students?

Anyone out there with an opinion on these questions? Post a comment on the blog space!

3 THE F-WORD

From the April issue of the Harvard Business Review (<http://hbr.org/2011/04/intro-to-the-failure-issue-the-f-word/ar/1>)

Failure. We’re hypocrites about it. Go online, and you’ll find scores of pleasant aphorisms celebrating the inevitability of failure and the importance of learning from it. But in real life—and in real companies—failure is anathema. We’re afraid of it. We avoid it. We penalize it.

It’s time for managers to get past platitudes and confront the F-word taboo [...]. Failure *is* inevitable and often out of our control. But we can choose to understand it, to learn from it, and to recover from it.

[In next week’s communiqué we return to the F-word...]

4 A FREE WORLD-CLASS EDUCATION FOR ANYONE ANYWHERE

[Reference received from Mr Johann Moller, ICT)

Original source: <http://www.khanacademy.org/>

The Khan Academy is an organization on a mission. We're a not-for-profit with the goal of changing education for the better by providing a free world-class education to anyone anywhere.

All of the site's resources are available to anyone. It doesn't matter if you are a student, teacher, home-schooler, principal, adult returning to the classroom after 20 years, or a friendly alien just trying to get a leg up in earthly biology. The Khan Academy's materials and resources are available to you completely free of charge.

The site hosts some free educational materials covering a wide-range of subjects and foci such as Algebra, Arithmetic, Banking and money, Biology, Calculus, Geometry, Chemistry, Cosmology and Astronomy, Credit crisis, Currency, Current Economics, Developmental Math, Differential Equations, Finance, GMAT, History, Linear Algebra, Organic Chemistry, Physics, Pre-Algebra, Precalculus, Probability, Statistics, Trigonometry, Valuation and investing, Venture capital and capital markets,

The site has over 2,100 videos and 100 self-paced exercises!

5 PROVIDING CONNECTIVITY TO OUR STUDENTS *WHEREVER THEY ARE*

This sounds like a very laudable project – to provide connectivity to students *wherever* they may be... except for us not exactly knowing where they are, at what time of the day, at what time of the semester...

Do we (or should we) provide them connectivity where they stay, or where their postal addresses are, or at the regional centres where they registered, or at the regional centres where they attend tutorials, or at their places of work, or at the addresses of their physical 'home' addresses?

Consider John, who works at one place, sleeps at another during the week and yet at another place over weekends. He registered on the Pretoria campus, attends tutorials on the Sunnyside campus, studies over weekends (when he is not working) in Olievenhoutbosch. On the weekends when he is working, he studies in the Unisa study centres or Unisa libraries in Pretoria. He is dating a girl in Hammanskraal and once a year he visits his parental home in Zimbabwe. When he needs to access the network or use myUnisa is he visits the house of a sponsor in one of the suburbs in Pretoria-north.

Increasing the connectivity of students depends on us knowing where they are. If we care to find out, it may provide a number of surprises.

6 PLANNING THE FIRST INTERNATIONAL UNISA ODL CONFERENCE 2012

On Thursday 26 May a group of representatives from different stakeholders met to start the initial discussions for organising the first (ever) International Unisa ODL conference during 2012.

There were a number of initiatives of different stakeholders that were contemplating hosting ODL conferences during 2012. At the STLSC meeting of April an invitation was tabled to which all colleges and stakeholders were invited to join forces in organising an international ODL conference during 2012.

Initial groundwork will be done by various smaller task teams to tentatively establish possible dates and themes or foci.

On **14 July 2011** a formal organising committee will be established. Stakeholders that are not currently represented will be invited to send a representative to the next meeting. Watch this space for more detail....

7 THE QUIET REVOLUTION IN OPEN LEARNING BY KEVIN CAREY

[Received from Prof Greg Cuthbertson]

Original source: http://chronicle.com/article/The-Quiet-Revolution-in-Open/127545/?sid=cr&utm_source=cr&utm_medium=en

In the late days of March 2010, Congressional negotiators dealt President Obama's community-college reform agenda what seemed like a fatal blow. A year later, it appears that, remarkably, the administration has fashioned the ashes of that defeat into one of the most innovative federal higher-education programs ever conceived. Hardly anyone has noticed.

Obama originally called for \$12-billion in new spending on community-college infrastructure and degree completion. The money was to come from eliminating public subsidies to for-profit banks that made student loans. But late in the process, some lawmakers insisted that savings that had already occurred, because of colleges' switching into the federal direct-loan program in anticipation of the new law, didn't count as savings. Billions were pulled off the table, and the community-college plan was shelved.

Two days later, negotiators found \$2-billion. But they could spend it only on a U.S. Department of Labor program restricted to workers who had lost their jobs because of shifts in global trade. The fit with the president's expansive agenda seemed awkward, and the amount was pennies on the original dollar. Cynical commentators called it a "consolation prize."

Then, the Education and Labor Departments decided to do something highly uncharacteristic of large federal bureaucracies: They began to talk. To one another. Constructively. What they devised could change higher education for huge numbers of students, many of whom will never attend a community college at all.

The concept is simple: Community colleges that compete for federal money to serve students online will be obliged to make those materials—videos, text, assessments, curricula, diagnostic tools, and more—available to everyone in the world, free, under a Creative Commons license. The materials will become, to use the common term, open educational resources, or OER's (emphasis added).

The open-resource movement has been under way since the 1990s, with free content distributed by institutions including Carnegie Mellon and Yale Universities, and the Massachusetts Institute of Technology. But there has never been an effort to promulgate OER's on a \$2-billion scale.[...]

Contrast that to nearly all learning materials produced by colleges today. Lectures, course notes, student work, interim test scores, group projects, papers—most of it vanishes forever into the ether, leaving nothing for future teachers and students to use, and no basis for objectively evaluating the quality of the teaching and learning that occurred. That is, perhaps, by design.

But while the availability of open educational resources has grown exponentially, the resources have had relatively little effect on the conduct of traditional higher education. In part, that's because abundance creates its own burdens. Even mega-versities offer only one class called Psychology 101. How do you pick among hundreds? Too much choice can be paralyzing.

Traditional colleges also offer an implicit guarantee of quality that, while often hollow in reality, seems real enough to potential employers. And while Yale, MIT, and the rest are happy to let outsiders follow along and learn online, they won't offer any course credit to non-enrolled students, regardless of how good their open courses are and how much users learn.

The \$2-billion Labor-Education project could transport the open-resource movement to a new level of prominence. Because the materials will be developed under the auspices of a federal-government competition, they will carry an assumed mark of quality absent from random lectures posted on YouTube. The departments also plan to organize the materials so that educators can search and shape them into rational sequences of learning. Private companies will be able to repackage, improve upon, and sell the materials they like, as long as they acknowledge the original developers.[...]

Similarly, videos produced by the free online Khan Academy include matched assessment exercises that students use to earn “badges”—academic credits of a different kind. The Mozilla Open Badges project goes a step further: It is focused on creating a new, open credentialing framework that can accommodate all manner of disciplines and professions, leaving teaching and learning to others.

These disparate elements are beginning to form an entire ecosystem for teaching and crediting human knowledge and skill, one that exists entirely outside the traditional colleges and universities that use their present monopoly on the credentialing franchise to extract increasingly large sums of money from students.[...]

Kevin Carey is policy director for Education Sector, an independent think tank in Washington.

Read the full article online.

8 CLOUD COMPUTING AFTER AMAZON AND SONY: READY FOR PRIMETIME? BY TIME WEBER

[Original source: <http://www.bbc.co.uk/news/business-13451990>]

Note: The hyperlinks in this copy of the text have been removed.

Cloud computing may be the hottest thing in corporate computing right now, but two IT disasters - at Amazon and Sony - beg the question: Is cloud computing ready for primetime business?

It's a nightmare moment. You are under pressure - to meet customer orders, finish a project, execute a deal - and nothing. Your computers, servers or network are down. If you are lucky, a few nail biting hours and a reboot or three later, you and your IT team have restored services.

But what if your IT infrastructure goes down and there's nothing you can do because your computing power sits in the cloud, provided over the internet by another company? When a key part of Amazon's EC2 cloud service collapsed, many of the firm's customers were reduced to publishing apologies on their websites, and click "refresh" on Amazon's service health dashboard.

Two of Sony's online gaming services, meanwhile, were hacked, compromising confidential data of more than 100 million customers.

The twin worries of cloud computing, security and resilience, are back, just as the promise of huge cost savings persuaded many companies to make the jump. 2011, experts said, would be the year when companies would get their business ready for the cloud. [...]

[...]

There are cloud services for consumers holding masses of customer data. Sony had to take its service offline for four weeks. A nasty bump for the global consumer electronics giant, potentially lethal had it happened to a smaller business.

Then there are infrastructure and platform services for companies that provide cheap storage, raw computing power, or software as a service. When a software upgrade at Amazon's data centre in North Virginia went wrong, many companies using the service disappeared from the face of the online world for a full four days. [...]

Stuck with one provider?

Cloud computing may be cheap, but robust back-up solutions cost money. Cloud users will have to re-examine how many copies of their data they need, and where to keep them, says Mr Engates.

"If you build a robust infrastructure across geographies, you can sustain an outage," he says and points to video-on-demand provider Netflix, one of the Amazon customers that dodged the outage without obvious problems.

Companies have to make a risk assessment: Do they need parallel infrastructures, multiple cloud service providers, even a hybrid cloud where the data is shared and synced between the cloud and the company's own servers?

[...]

Security questions

"Yes, the cloud is a concentration of risk," says Mr Engates, but people are attacking the customer, not the cloud. "It is easier to defend the cloud, because it has more resources and bandwidth".

[...] Mikko Hypponen, chief research officer at internet security firm F-Secure, warns both consumers and companies that when they "move into the cloud, you get lots of benefits, but at the same time you lose control of your data... you have to blindly trust the vendor."

Consumers can help by playing it safe. When answering security questions "don't use your mother's real maiden name; don't give out your real birthday; answer with a number, or a street name or deliberately misspell."

Keeping online email accounts safe is key to cloud security, says Mr Hypponen, because it's here that criminals will find all the registration emails for financial services, it's here that they intercept requests for a password reset.

"Whether we like it or not, cloud is here to stay, because the benefits are clearly larger than the risks," says Mr Hypponen. "During the first years of this major shift [to the cloud] we will see more problems, but we will also learn, and the systems will get more secure."

Back to IT basics

When cloud services fail, the data is likely to get lost, and recovery is slow at best.

After Google's cloud-based email service crashed, says Joe Heiser, "it took Google four days to restore [the data of] 0.02% of the users of a single service."

"What is not in the least bit clear is the relative ability of any cloud service provider to restore your data into their services," Mr Heiser warns cloud customers.

"We do not believe that the cloud is ready for everything yet," admits Rackspace's John Engates, but believes that cloud services can be part of the solution.

Companies that had a mail server outage can take "days and weeks to recover data from back-up tapes," he says. Putting the back-up into the cloud, with a different provider in a different location, could speed up recovery.

It's back to IT basics: One concept "that should never be lost in the cloud," says Mr Heiser, "is the need for contingency planning."

Read the full article on <http://www.bbc.co.uk/news/business-13451990>

9 ODL REPOSITORY AND BLOG

All the ODL task team reports, the overview of the recommendations of the STLSC and other ODL documents are available on the [Unisa Library's Institutional Repository](#). The repository is updated on a regular basis and if you register on the repository, you will get notifications of any new uploads.

Drafted by Dr Paul Prinsloo

ODL Coordinator

Office of the Vice-Principal: Academic & Research, Unisa, 31 May 2011

+27 (0) 12 4293683 (office), +27 (0) 823954113 (mobile), prinsp@unisa.ac.za

Disclaimer: The opinions expressed in this ODL Communiqué represent my personal viewpoints and do not represent the viewpoint of any other member of the Unisa community.