Teaching by Twitter

*Extending the classroom via Social Media?*

Andrew Smith
@OUCisco or @teraknor

Life-changing Learning
Brief - who am I

Senior Lecturer in Networking

Work recognised by JISC in UK as one of UK Higher Education’s top #50 Social Media Influencers

- I specialise in teaching Cisco CCNA and CCNP networking to undergraduate as well as postgraduate students as well as Security (CyberSecurity / Network Security / Digital Forensics / Security+) and Linux (LPI and Linux+)
- I have been active in the Cisco and CompTIA academic communities for too long to be polite
- Find me as @teraknor on twitter or follow @OUCisco / @OUcyberSec
- I work at the Open University - a Blended Distance University in the United Kingdom
Teaching by Twitter

Setting the Context
We had 2400+ students on our Linux+ short course

This course is absorbed into our mainstream provision and has already reached another 3000 with Linux+ related content

The Open University has c600-800 students every year studying CCNA or CCNP based modules, having reached 6500+ Cisco Academy students since 2005

Around 450+ have also been reached with Security+ content
Engaged in social media activity since September 2013

We teach nerds network engineering - so far the focus has been Cisco moving to @OULinux from June in tandem with CompTIA and LPI

We have 1840+ students following our CyberSecurity MOOC twitter feed (pre Security+)
The Open University has been teaching since 1969 - Royal Charter making us ‘an old university’

- On average around 150,000+ students
- Reached five million students since inception
Blended Distance Learning requires a large machine to meet demands of scale

We vary model according to discipline, content and context

- Some modules entirely online
- Some modules require face-to-face tutorials
- Some modules have day schools
- Some modules have residential schools
Context (4)

- We create content - sourced content is used, use is low volume in comparison
- A student must be able to read the material and complete the assessment in their own context - we set way points, they manage their own study
- Our model is based on an asynchronous paradigm
Back to Teaching by Twitter

Please do tweet! @teraknor or @OUCisco & coming soon @OULinux
Free is a price I am willing to pay

- we cannot predict what platform our students/customers prefer to use
  - it could be a smart phone
  - or a web browser
  - or a specific application

- nor should we care

- developers everywhere have created the software for us

- so, let's use them all
And then comes the inspiration ... 

Let’s use social media to enhance the teaching of one of our Network Engineering modules. Ensuring that it leaks out onto the Internet as well as supports the learning of our current students.

Using social media to deliver a form of knowledge nugget or intellectual reinforcement technique.

While the focus has been on ‘Cisco’ we know that this translates to all vendors - and plan to do this.
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What platforms do we use?
So what platforms do we use (1)

- Creation of an ‘Open University Cisco’ group
- Currently over 490+ members
- Tends to attract a variety of professionals (which is obvious)
  - Cisco CCNA/CCNP engineers beyond the confines of the module being taught
  - Open University Cisco Alumni
So what platforms do we use (2)

- Created a fan page (540+) more from within Open University Course
- Also specialist Packet Tracer >> Mac group (1580+)
  - Linked to my pedagogical simulation work
- Very eclectic mix of members
- Occasional questions come in via this route
So what platforms do we use (3)

- 730 followers
- 30% seem to be from within the course itself
- some we pick up from retweets, faves and exchanges with @CiscoNetAcad
- we do get frequent twitter exchanges with a small section (25-30 est) members of this community
- also embedded within moodle - reaching 500 students on current module presentation
- we will discuss ‘impressions’ later
So what platforms do we use (4)

- 120 followers
- the quietest of all ...
- however it does help in search engine rank
- but ... I use the Google to RSS site ...
  - we see some using RSS readers
So what platforms do we use (5)

- Allows depth to some of the content
- Has been useful in sharing some internal ideas, externally
- Looking to evolve as a source of additional content
So what platforms do we use (6)

• we have some deliberate short ‘named’ URLs
• used when we link to internal university content
• also used for occasional course promotion
So what platforms do we use (7a)

- **Periscope** - Mini Monday Networking
- Practical **Streaming Video** Show Tell sessions around one specific network engineering topic/concept/skill
- *Persistent for 24 hours*
- Session length ten mins
- Typical audience varies from 40 to 120 per session
- **EXPERIMENTAL**
So what platforms do we use (7b)

- Facebook Live – NetNerd – a series of short webinars, over five evenings for one week
- Practical **Streaming Video** Show Tell sessions around one specific network engineering topic/concept/skill
- *Persistent forever*
- Session length ten mins
- Typical audience 250+
- **EXPERIMENTAL**
So what platforms do we use (8)

- **Micro PodCasting**
- No more than ten minutes of audio
- Idea stolen from Curtin Cisco Academy for Vision Impaired and supported by Royal National College for the Blind (in the UK)
- Demo/Explanation entirely audio yet kept deliberately short in keeping with affordance of Social Media
- Is 1/2 an hour too long for a podcast in the social media space
So what platforms do we use (9)

- IFTTT - IF This Then That
- Creation of Rule (recipes) for social media integration - also works with IoE technology
- You do one thing on social media - it will automatically syndicate to other platforms
- One input becomes multiple outputs
So what platforms do we use (10)

- **Hoot suite**
  - Multi Social Media Platform Scheduling and Automation
  - Allows you to schedule one message at a time on multiple accounts (for free)
  - Allows you to schedule multiple (350) messages on multiple accounts via CSV for USD$ 9.99 per month
  - I use this for Facebook, Twitter, LinkedIn and Google+
Then stringing it together

$9.99 per month
Teaching by Twitter

Engagement Methods!

Life-changing Learning
Engagement Methods (1a)

- Sequential CSV’s* of Course related content
  - We know our study calendar (you may know this as a scheme of work)
  - We know more-or-less when students will be covering content
- Use a separate CSV with weekly reminders
  - what should you be studying
  - what assignments are due
  - day schools (classes) or other module events
- As we are externally facing, occasional information on the course opportunities we offer
  - Covert rather than overt

*Comma Separated Values
Engagement Methods (1b)

- The sequence must follow the study plan - however, the student can be:
  - Ahead as this is a reminder
  - On time as this is reinforcement
  - or behind as this is foresight
Why CSV ...
- they work with the Hootsuite publisher tools
- but no repetition
- there has to be less than 140 characters, as Twitter is the lowest denominator

I generated around 1100 automated updates, which can be reused, amended, added to etc

I am actually lazy by default and wonder why we automate so little ❗️
Engagement Methods (2a)

I am automating at this precise moment - there are updates going out every 5 - 10 minutes on @OUCisco
Engagement Methods (2b)

- Do not underestimate your reach
- You will easily go beyond your own ‘campus’
- Do not simply stick to local times as community is potentially global
- You will eventually discover the best times per presentation
Engagement Methods (3)

- Do not fear memes
- Use plenty of images
  - Humour is needed to break up the technical/academic content
  - You have to decide on what the right mix is
  - This is a module, where written word is priority, yet images help
Engagement Methods (4)

- YouTube and other video sources
  - These consume time ... therefore for this run I focussed on humour
    - I used ... the day the routers died
    - Mr Bean taking an exam
    - the medieval help desk
    - elders of the internet
- I am looking to expand these with some teccie vid’s, I have already produced two with our Knowledge Media Institute which we have already shared in the next course
- Also one of our associate lecturers has been producing short teccie YouTube clips – which we are sharing
Engagement Methods (5)

- If it comes to mind or is current ... **DO IT!**
- News stories or popular themes, add them in.
- Articles published or other activities consider them

I write for ‘The Conversation’, it is their logo to the left...
adding in these articles helped readership and developing the wider community following the different social media platforms
Engagement Methods (6)

- Talk to them via social media ... **they do not bite!!!**

- Questions do come in via the different social media outlets
  - Engage, but also allow others to engage as well
  - Encourage those who are also engaging, they are your greatest allies
Engagement Methods (7)

- Open questions work ... followers like to answer these
- Enquiring about the opinion of the audience also gets a response.
- Take note of which posts get a reaction, it will surprise you ... some of the tougher subjects are more likely to get a response
- Be prepared to ditch posts or reuse posts
Finding your allies

- There is nothing wrong with getting a few ‘friends’ or ‘colleagues’ involved

- Very useful for ...
  - RT’s in Twitter
  - Shares in Facebook
  - Likes on LinkedIn
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Evidence of Impact?
Analysis: Twitter

[Graph showing impressions and tweets over the months]

- Impressions
  - September: 0
  - December: 40000
  - March: 10000
  - June: 30000
  - September: 20000
  - December: 10000

- Tweets
  - September: 0
  - November: 40
  - January: 120
  - March: 80
  - May: 160
  - July: 200
  - September: 120
  - November: 80
  - January: 40
What next at the OU?

- Replication with:
  - Extending @OUCyberSec (2100+) which follows each FutureLearn MOOC presentation
  - Development of @OULinux ready for a specialist short course
Any Questions & discussion