‘My interest is in the future because I am going to spend the rest of my life there.’

Charles F. Kettering

“To assess the potential of a particular technology for supporting collaborative learning, researchers usually rely on specific analytical models” (Resta and Laferrière, 2007). This paper will discuss the use of a particular technology, that being user generated video postings online, known by the dominant “brand” in this genre as “YouTube”. This paper will explore the consequences of using “YouTube” in teaching hybrid (or some use the term blended) 3rd and 4th year e-business and international business courses at a large North American university in the last two years of the first decade of the new millennium.

While Resta et al said that such assessments are usually done relying “…on specific analytical models”, this paper will discuss this topic based on how this technology has actually been used (2008-2010). In email communication with the author in early November 2010, Prof. Paul Resta was asked if “since your 2007 paper have there been any papers, that you know, discussing the use of newer social media in teaching, such as Twitter, YouTube etc…..”. Resta replied say “not very much” though he did mention two papers discussing the use of Twitter.

Given the absence of a specific analytical model (1) which can adequately capture the technical dynamic of a co-creation model such as YouTube, the author of this paper intends to discuss it’s use based on actual experience in the classroom and online – from which observations may be shared with like-minded faculty who may consider using YouTube for augmenting their online course content in a hybrid / blended teaching environment in 2011-2012.

“New Web 2.0 technologies and websites, such as a blog, wiki or YouTube, make new demands on learning, and they provide new supports to learning, even as they dismantle some of the learning supports upon which education depended in the past.” (Duffy 2007). Canada’s east coast internet guru Stephen Downes (2008) argues the case for YouTube in teaching more simply by saying “The educational use of a site like YouTube should be apparent”.

What are some of these new demands on learning – Prof. Bill Ashraf of the University of Sussex in a 2009 paper titled “Teaching the Google-eyed YouTube generation” discussed how the Universities in the UK are dealing with enormous challenges as they deal with the concept of education as a “consumer product” and face an intense competitive environment. In talking about how faculty use Web 2.0 technologies such as YouTube, Ashraf (2009) explains that universities “are facing enormous challenges to establish competitive advantages whilst
attending to customer need and focus”. One aspect of the “enormous challenges” faced by universities in the UK, and I would submit Canada, the U.S. and many other regions, is an increasingly cultural diverse student population that employs IT and communication technology on the most up-to-date devices. Asraf’s paper not only explores the usefulness of integrating YouTube into teaching and learning as we move through the Web 2.0 age, but also discusses how YouTube and other social media can be incorporated in giving voice to students from a diverse range of ethnic and linguistic backgrounds. Keeping in mind however that although YouTube is seen by many (the author of this paper included) to have academic possibilities, it was launched and spread primarily “as a public video-sharing website where people can experience varying degrees of engagement with videos, ranging from casual viewing to sharing videos in order to maintain social relationships” (Lange 2008)

As part of the discussion of using YouTube, it might be necessary to mention how the term “Web 2.0” is sometimes applied and introduce the relevance of “Web 3.0”. Such a brief discussion will be helpful when it is understood that early discussions of YouTube were covered under the heading of “Web 2.0” or “Web 2.0 Technologies”.

When Tim Berners-Lee told the BBC in 2005, how he envisioned the web in the early 1990’s, he is widely quoted as saying that he “intended the Web in his vision as "a collaborative medium, a place where we [could] all meet and read and write" Yet despite Berners-Lee’s suggestion that web content should be built for collaboration, early commercial development of the web was product oriented and it wasn’t until 2004 that web gurus such as Tim O’Reilly put forth the term “Web 2.0” (2) to describe a later generation of web usage aimed at circumstances where the viewer of web content could interact with the entity that created such content and together additional new content could be made and read, heard or viewed. Along with the increased desire to interact with web content creators, Web 2.0 also came about partly due to the technological developments in computer processing that allowed more complex software programs to run on computers and higher bandwidth that allowed access to such programs on smaller and more mobile devices.

“User-centred web phenomenon such as Web 2.0 such as blogging, social video sharing, (exemplified by YouTube) and collective editing (wikis or Wikipedia as an example) are disrupting traditional ideas about how students interact online and how content is generated, shared, and distributed.” (Duffy 2007)

In the last month of 2010, as this paper is being written, the phrase “Web 2.0” has been used
and abused for 6 years and during that time the computer servers upon which the World Wide Web have been flooded with millions and millions of pages of text content, audio clips and videos. While it has been interesting that so many people have contributed to such building, one of the consequences is that information, one can use to make a decision, is more and more difficult to find – leading to the concept of “Web 3.0”. Still in its infancy, and with definitions changing monthly as more and more companies and web experts evangelize about the benefits of the concept, Web 3.0 does not have a simple definition. What can be said about Web 3.0 is the problem it attempts to solve – TMI – too much information which is not easily accessible from which people can make “extractions” to help them in their daily tasks.

The basics of Web 3.0 are a series of inventions (software and hardware) that allow users to use more “natural language” in making queries of databases. In a 2006 interview to the International Herald Tribune, Tim Berners-Lee told journalist Victoria Shannon that “Web 3.0” will have a component which is now (2010) referred to as the “Semantic Web”. Referring to events that might culminate in 2015, Berners-Lee suggested that a Semantic Web would make it much easier to find what we are looking for in the context of the great explosion of web content – a point directly related to the growth of Social Media constructs such as YouTube (Shannon 2006).

In the world of IT developments that have commercial promise, we talk about the need for a "killer ap", - simply expressed this means really wide spread popular application of a specific technology, which, upon reaching a critical mass of users will allow the product to earn substantial revenue for the originators and subsequent versions will gain widespread use among the day-to-day devices and applications in use presently, and in the future: examples are text messaging for BlackBerries and car navigation systems for GPS.

YouTube used by faculty to deliver course content.

When reflecting on how YouTube could be used in post-secondary education, several subjects and disciplines that require teaching using imagery and accompanying audio, come to mind. Some of the earliest examples of using text and imagery in teaching are the ancient Chinese descriptions of surgery and the papyrus rolls found in several of Egypt's pyramids explaining the embalming processes. The teaching of subjects in nursing and medicine has enthusiastically embraced web technologies since the mid-1990's and current examples are the 2009 paper in The Internet Journal of Allied Health Sciences and Practice titled “An assessment of faculty usage of YouTube as a teaching resource” written by Sloane Burke, Shonna Snyder and Robin
Rager (3) and the 2009 article in Nurse Educator titled “An Untapped Resource: Using YouTube in Nursing Education” by Janice Agazio and Kathleen Buckley.

In the introduction to their 2009 paper, Burke et al assert that until their investigation and sampling of medical education professionals, “there had not been any quantitative assessment of faculty using YouTube as a health education resource for in-class and online courses.” Although the number of respondents to the East Carolina University survey was a “modest” 24, it is the experience of the author of this paper that their discussions and results can be extrapolated to larger populations of academics in other disciplines.

As this paper was being written on a snowy weekend in December, during a break I went over to my neighbour’s garage and struck up a conversation with some friends. One of these friends was “Mike” who had suffered a serious work injury as an auto mechanic in 2009 and had just begun, in 2010, the OISE Technical Education Program, which he hoped would result in the opportunity to be a High School automotive teacher. I have known Mike for some time and inquired as to his progress. Mike responded enthusiastically with a narrative about how his OISE professor uses YouTube to communicate particular parts of the course, and as a tool by which the students complete tasks and submit them to the professor for evaluation.

After telling Mike that, ironically, I was in the middle of a paper about how faculty use YouTube for teaching and learning, Mike agreed to a “mini interview” in which we

- Talked about profs using YouTube
- For an essay about profs using YouTube
- Which we turned into a video and posted on YouTube

The video was completed Dec 12th and uploaded Dec 13th. Readers of this paper are invited to consider the video part of the “content” of this paper and can view it by accessing the link http://www.youtube.com/watch?v=Ac-Gx-wMfPE

The video is 3 minutes in length, the first 90 seconds is a narrative introduction by myself, the remainder 90 seconds is the interview with Mike.
My professional experience with posting videos on YouTube, to deliver course content, is as follows. From April 2008 to present (Dec 2010) I have posted 117 videos on my YouTube channel for teaching and more than a dozen videos on my YouTube channel for learning (CTL1608).

The videos that I have created and posted to YouTube could be divided into four main categories.

1. Course admin / info
2. Screen capture narratives
3. Lecture segments
4. Professor-Student, Student, Student-Student segments

1. A small number of the videos discuss teacher administration topics such as information about a particular assignment for a course, how class participation marks are calculated, requirements for a group presentation and other similar purposes. These videos have not only been useful for communication essential information, but they have also become popular with other faculty – for example the videos on earning class participation and the videos dealing with preparation for tests and quizzes.

2. Another portion of the videos were created by using a screen capture software program (Camtasia Studio V 6.0) and having an audio recording of my voice conducting a narrative as the mouse scrolled down the page of a website that was part of one of the Learning Objects in my online course content. These videos are often used for purposes such as showing a student the proper steps for using some particular software by showing the sequence and where to click. Having a graphical representation of a sequence of actions that is awkward to explain my words alone, has been very helpful, especially with students who struggle with ESL challenges.

3. The majority of the videos are segments of me talking live in the classroom as I lecture on a specific topic – usually in conjunction with the Learning Object for that topic being shown on the screen at the front of the class. In 2009 these videos had a low degree of granulaization but as I continued to create more and more videos in 2010, the topics became more sub-divided into smaller, more precise units and it was noted that the degree of granulaization became higher. An example will serve to explain – in 2009 I was filmed talking in one video at length about the ten different components of SEO – Search Engine Optimization. In 2010 I created a video about Domain Names and
divided it into six different segments breaking the topic up into more “bite sized chunks” such as Domain Name Registration, Domain Name Hosting, Domain Name Hacking etc.

4. The remainder of the videos, which is a number growing in proportion, are clips of me interacting with the students either in the form of a question and answer series about a teaching topic, or using the Socratic method in class with one or more students to flesh out a point in the lecture.

Dev Basu was a former student in the 4th yr e-commerce class at UTSC. Dev also served 2 years as the TA for the course and subsequently launched his own SEO company upon graduation. This 2009 video conveys the points of SEO Search Engine Optimization by me asking Dev for an update on current SEO techniques, as we scroll down a list of the techniques used in 2008. Students were so enthusiastic about seeing a recently graduated person become part of their learning material that many specifically commented on this in my 2009 and 2010 teacher evaluations.

http://www.youtube.com/watch?v=jibSpHsdHf8

Faculty using other faculties’ YouTube videos to augment course content.

In their 2009 book “YouTube : online video and participatory culture” Jean Burgess from the Queensland University of Technology in Australia and Joshua Green from the Comparative Media Studies program at MIT explore YouTube from many angles. Burgess and Green are one of the very few faculty that have written at length about YouTube in the 2008-2010 time frame. While their treatment of YouTube might be referred to as comprehensive by virtue of the number of topics and the depth within each, one topic that is unfortunately thin is a discussion of teachers trying to find teaching content uploaded by other teachers. Other than saying that searching for videos is difficult and that the number of truly useful teaching/learning videos is very small in proportion to many of the corporate education videos, Burgess and Green’s 2009 book does not serve to advance any understanding of how faculty are using the YouTube videos created by other professors.
Prof. Michael O'Neill has been teaching multi-media marketing and interactive marketing at Seneca College for more than a decade. Close to retirement, Mike O’Neill has earned a reputation as a leader in the use of web-based content for conducting his classes in the School of Marketing and eBusiness. When asked “why does it seem that profs are not using YouTube to find other profs material for use in their online content?”, O’Neill answered “do you generally find many profs at the college and university level collaborating to share teaching materials – or are we all somewhat secretive about what we do, due to the competitive environment”.

Leaving O’Neill’s cynicism aside, a simpler reason for an apparent lack of utilization of other faculty’s content might be simply due to the fact that YouTube never was intended to be an educational construct and was primarily intended as a social media entity in the same realm as FaceBook and mySpace and Twitter – as explained by John Hartley in his paper titled “YouTube, digital literacy and the growth of knowledge” given at the 2008 Media, Communication and Humanity Conference in London. Hartley cautions his audience that looking for academic tools and opportunity within YouTube is misdirected since this entity was never designed for that purpose, rather it serves the interests of “…lonleygirl15, pretend to be something else…” (Hartley 2008).

A final note on the point of faculty using other faculty’s YouTube videos comes from my own experience inviting comments. In the 2 ¾ years I have posted my videos for academic purposes I have enjoyed hundreds of comments from students in the comments section below where the videos are posted. Not once in 2 ¾ years have I ever had another professor or high school teacher post a comment of any kind – nothing saying “used your grading explanation”, “used your presentation tips video”… nothing.

**YouTube used by faculty to solicit student comments and contributions further enriching and contributing to the course content.**

“One way that social networks are articulated and negotiated on social network sites is through linking and viewing profiles” (Lange 2008)(Donath & Boyd 2004). Understanding that each day my students were watching hundreds of videos on YouTube, visiting dozens of pages on FaceBook and reading many posts on Twitter, and all while responding with their own videos, comments, “friending” and tweets, I endeavored to capture this sentiment by asking them to respond to my videos with comments.
After having spent several months in 2008 creating and posting videos to YouTube, I began 2009 with the intention of having the videos “carry more weight” by exploiting the comments section – namely have students make comments on the videos and use those comments, were appropriate, to further the explanation and discussion of the topic being studied. Salaway, Caruso, and Nelson (2008) caution that even though students have greater access to the web and are comfortable making and posting content to the web they are more inclined to interact with social media, such as YouTube, in a way that focuses on communication as opposed to building or constructing content for some “high order thinking”. Keeping in mind the caution of Salaway et al, I ventured on this path in the context of making my videos participatory – understanding that true communication is a two-way action, not singular.

Jenkins, Clinton, Purushotma, Robinson, and Weigel (2006) discuss four characteristics of what is termed by them “a participatory culture”.

- “Affiliations – formal and informal memberships in virtual groups that are typically formed through specific media (MySpace™, Facebook™, discussion boards, etc.) or share interests (gaming, hobbies).
- Expressions – creative productions such as “digital sampling, skinning and modding, video, fan fiction writing, zines, mash-ups, etc”.
- Collaborative problem-solving – formal and informal teaming and competing; developing new, shared knowledge (as in posting to Wikipedia), alternative reality gaming.
- Circulations – Shaping the flow of media (podcasting, blogging)”

Collaborative shared knowledge was the objective that I sought in 2009 and by Q3 2009 I had achieved more than 200 comments on two dozen videos in a 3rd year international business course at the university level. The initiative to launch the collaborative comments came from an online unit discussing how different cultures around the globe require particular understandings in order to be effective in conducting business. The student comments were contributions, from their personal experience, of living in, or visiting particular regions and what people would need to know in order to be successful in that location. While having a rather modest goal of achieving student interest in the concept, I was delighted when a number of students extended their participation to a higher level by scripting, filming and uploading their own videos.
The screen capture to the left shows a popular and humorous video done by my UTSC students which illustrates some common misperceptions and mistakes in dealing with Chinese culture. youtube.com/watch?v=jvXCeYuMNiQ

This particular video gathered so much interest from the class that it precipitated students making one for India, Japan and Mexico.

What are some of the benefits of these student contributions? - instead of me showing a video to the class of my comments on common misperceptions and mistakes in dealing with Chinese culture, I was able to show a video made by Chinese students, about Chinese culture. Further participatory input was created when the 2010 students made additional comments on the 2009 “Chinese Culture” video in the YouTube comments section.

**Challenges to using YouTube beyond 2012**

While this paper has primarily dealt with a discussion of YouTube as a resource for teaching and learning, it would be irresponsible if the author did not venture some comments on the circumstances of YouTube as an online business venture – which may or may not survive in its present form into 2012 and beyond. One of the most obvious reasons for such a discussion is that regardless of the academic merits of what might have been discussed in the preceding pages, there are certain forces at play which are challenging the existence of YouTube, which might give contributors and users some pause before investing an inordinate amount of time and resources in this particular repository.

In the opinion of the author of this paper, YouTube faces key challenges: these challenges could be described under five main headings (although there are additional problems that are also significant).

- Business Model
- Technological Environment
- Competitive Environment
- Economic Environment
- Political – Legal Regulatory Environment
Business Model

YouTube's Business Model is a mix of the Co-creator Business Model and the Advertising Supported Business Model.

The Co-creation Business Model \(^{(4)}\) recognizes that sometimes businesses are in a situation (like FaceBook) where the activities of the customer, or how the customer uses the product/service results in value. This value can attract more customers and also allow the company to increase its competitiveness. If the vendor can also find a way to "monetize" the value coming from the customers contributions then you have a situation where the company realizes income, not from employees work (the traditional way) but from customers. Then the company's focus will change to "serving the customer" to facilitate customer's creation of more value. The principle of Co-creation recognizes that communication is just as much about listen as it is speaking. One of the challenges facing YouTube is that the contributors (people uploading videos) are so numerous that traditional models of customer call centres or FAQs simply can’t handle the volume of inquiries about particular functions and features, leaving thousands and thousands of contributors/customers frustrated and angry about their interactions with the company.

A second consequence of the particular blending of the Co-creator Business Model and the Advertising Supported Business Model is the challenge faced by YouTube in monetizing the millions of page views and hundreds of thousands of contributors. Making money from the large numbers of users and contributors has not been easy – yet as the contributions of videos increases at a dizzy pace, a commensurate increase in costs is accumulated by the growth in servers and the use of bandwidth. Simply put, the longer it takes to figure out how to make money from YouTube users, the more money is required to operate YouTube servers.

Technological Environment

“Just as the appearance of the Web browser in 1994 marked the transition from the text Internet to the visual Internet, the creation of YouTube in 2005 marked the transition from the static Internet to the dynamic Internet” (Downes 2008). In Downes 2008 paper he explains that one of the technical circumstances that made this transition possible was the widespread adoption of standard formats for images (GIF and JPEG). I would suggest that what really led to an explosion of content posted to YouTube in 2009 and more particularly in Q1 and Q2 of 2010
was more people with iPhones and BlackBerries taking short videos and uploading this content at a relatively low cost encouraged by the cut rates of the major wireless providers.

Advances in the Technological environment have created more devices (iPhones, Blackberries, Palm Pilots, Digital Video Cameras etc.) which produce more content (video) to upload to YouTube. From the period 2009 to present (Q4 2010) there has also been a marked increase in the quality of videos created as many cellphones moved from simple cameras with 1 Megapixel to 3 and 4 MP by mid-2010. In October 2010 various web news sites (5) were reporting that SONY has tested and is ready to make available to cell phone manufacturers a 16 MP camera. The increase in camera capability has resulted in a surge in the number of videos being available to be posted, and the high MP quality has increased the files size and the length of the videos – all factors which further burden the YouTube servers.

In addition to a proliferation of handheld devices, low wireless connection rates, and higher quality cameras, a fourth reason YouTube content surged in the last years of the first decade of the new millennium was the widespread adoption of Flash compression software by Macromedia. Using flash allowed large files sizes to be uploaded, and downloaded from wireless devices at a speed which met with the expectations of the “wired generation”.

It is said that “YouTube and other Web-based video sites provide online educators with a vast archive of free Web-based video content” (Snelson 2008). To what extent are YouTube videos free? When Dr. Sloane Burke and his colleagues at East Carolina University conducted their 2009 study of faculty usage of YouTube, it was pointed out that conducting searches for relevant videos to use could be very time consuming. Time was wasted in part because the people searching within YouTube had to use many combinations of words and phrases and scroll through large numbers of clips in order to find some segments worth using in class. Time was also wasted by the fact that people who posted clips seldom used enough words to fully discuss the content of the video, or use words that appropriately represented what was being shown – thereby, in a sense, causing their videos to be hidden since searches for such clips do not result in them being found due to this identification error.

When Search Engine Google replaced Yahoo! in 2002 (in terms of how businesses sought to position their sites online) (Richardson 2003), one of the challenges understood by website designers was that the content being created on the web, was proceeding at a pace faster than the ability of Search Engines to index the content – making it harder and harder to find web-based material. According to YouTube’s fact sheet for new users (6) every minute of every day
(circa November 2010) sees 24 hours of video uploaded. The stunningly fast growth of YouTube has created a similar problem to that faced by Google in 2002, namely that the number of videos uploaded each day is proceeding at such a fast pace that the Search Engine algorithm’s ability to categorize and index this content is falling behind the rate of increase – a further example of some of the challenges created by the complex technological environment.

**Competitive Environment**

Business competitors are:

- Other organizations offering the **same product or service now**
- Other organizations offering **similar** products or services now
- Other organizations offering **a variation** on a product or service, **that you cannot**
- Organizations that **could** offer the same or similar products or services **in the future**
- Organizations that **could remove the need** for a product or service we sell

YouTube suffers competition in all five areas noted above, in particular, competition from the dozens of “- - - Tube” knock-offs such as www.blinkx.com, which bills itself as the “World's largest video search engine” boasting more than 35 million hours of content. YouTube videos are on YouTube servers, based on uploading from contributors. Blinkx.com, and other such sites have references and links to the millions of videos on the web outside of the YouTube structure.

**Economic Environment**

The Co-creation Business Model and the Advertising Supported Business Model ultimately depend on advertisers buying ad space within the structure of the viewed material. The technical challenges of “quantifying” and “segmenting” the viewers leaves advertisers unsure of the ROI (return on investment) for the advertising they buy. These uncertainties, coupled with a North American and European cut-back on advertising among consumer branded products, has left YouTube fighting for a smaller piece of the internet advertising budget among companies nervous about obtaining sales for their promotional activities.

**Political – Legal Regulatory Environment**

The political environment within particular nations states, and the corporate goals of global enterprises serve to influence laws and regulations that are promulgated effecting YouTube.
An example of a regulation from a nation state, that effects YouTube users, is the requirement (experienced by the author in November 2010) in South Korea that persons uploading files to YouTube must be identified through a South Korean email address verified by a South Korea ISP. Titled the “Act on the Promotion of Information and Communications Network Utilization and User Protection”, this South Korean government regulation went into effect in April 2010 and was intended to allow the South Korean government to be able to identify any person or persons posting content about activities, for which the government might wish to know more details. Google, who owns YouTube, and who’s co-CEO’s regularly have press coverage of their snubbing of the “Great Chinese Firewall”, responded to the Korean government’s actions by shutting down the uploading functions of www.kr.youtube.com – leaving Koreans with an option to upload using www.youtube.com – however most ISPs block access to the main YouTube site as they bend to the South Korean government’s dictums.

An example of how a global enterprise uses laws and regulations to protect its interests, can be seen in the legal jousting between Warner Music and YouTube. Warner Music, “reportedly unhappy with the amount of money it was receiving from YouTube” has arranged for videos that carry sound segments from music copyrighted by Warner’s artists, to be blocked. People who create and post such videos have an option to submit “a dispute” claiming “fair use”, but the process is not well known and most people simply withdraw their upload. Ironically, while Warner and other labels complain about YouTube’s contributors using segments, unauthorized, in compilations of videos, these same music label conglomerates pay YouTube substantial amounts of money to profile new artists and buy information about downloads to allow them to better refine their target market segments. YouTube provides the music labels with an important new channel to market to the web-based segment, as much as it causes problems with issues of piracy and copyright infringement.
Conclusion

When Chinese leader 周恩来 Zhou Enlai was asked what he thought of the French Revolution, he was quoted as saying "it is too early to tell". Although some may feel 150 years provides enough of a perspective to make some fairly certain conclusions on a well known political event, in the case of providing an opinion on the validity of YouTube for teaching and learning at the post-secondary level – it is indeed too early to make grandiose predictions on a web-based structure that is barely 30 months into achieving widespread use.

Faculty who want to keep pace with the expectations of students in a world increasingly driven by how a young demographic use information technology, may want to spend time and energy “catching the wave” in the beginning. Readers of this paper who teach at the college and university level will remember those of their colleagues who caught the wave of PowerPoint when it arrived in the mid-1990’s, and reaped the rewards of attentive audiences, and possibly higher teacher evaluation scores; can the same be said of professors posting videos on YouTube in 2009-2011 – it remains to be seen if YouTube or any other “-- - - Tube” structure will prove suitable for teaching and learning.

It could be the case that YouTube’s business model and technological advantage becomes eclipsed by a newer firm, such as what happened when browser Internet Explorer edged out the original Netscape and search engine Google replaced original market leader Yahoo! People posting content to YouTube, in the meantime, would be advised to back-up their videos on hard drive as a contingency. Or it could be that social networking sites morph into repositories of all sorts of circumstances were people post academic content for which they wish comments and engagement. As “being found” in Google becomes more and more difficult, and as searches within FaceBook and YouTube outpace searches in Google, it might be a possibility that academics who want their material to be found, and shared, will see social networking structures as very advantageous as we begin the second decade in the new millennium in two weeks time from when this paper was concluded.

As Stephen Downes said “a site like YouTube can provide students with the opportunity to create powerful messages, present a vision of students today, and show how the Web is using us” (Downes 2008). On the other hand, as I type this final sentence, I am mindful of the axiom that good technology can’t make good teachers, and, as Christopher Conway (2006) writes, "YouTube is not necessary for good teaching, in the same way that wheeling a VCR into the classroom is not necessary, or bringing in PowerPoint slide shows with images, or audio
As I was putting the “final touches” on this little paper, I found a reference on the web to www.teachertube.com. Had a look at this site for half an hour and my snapshot conclusion is that it could be a very useful repository as it grows. In my paper I noted that a number of faculty have found that the YouTube has grown so fast, and contains such a diversity of topics, with an equally diverse range of “quality”, that it can be challenging for faculty to find truly useful videos for augmenting their course content.

Stephen Downes mentions Teachertube in his 2008 paper noting “TeacherTube is tiny compared to YouTube, but nonetheless contains almost 20,000 videos and has seen some items attain as many as 500,000 views”

TeacherTube’s smaller “target market segment” may result in a higher satisfaction rate among users – in which case many teachers may migrate their content out from YouTube – making the topic of my paper somewhat obsolete – what a fine way to conclude!

Tim Dec 16th

Some YouTube / TeacherTube facts

- YouTube was launched in Dec 2005,
- TeacherTube was launched in March 2007.
- In Oct 2010, TeacherTube has 200,000 educational videos and 1 million page views per month.
- 2 billion videos a day are watched on YouTube
Notes

1. From 2nd week of November to 1st week in December the author of this paper conducted exhaustive searches through Google Scholar, and other search engines and online search tools for articles discussing directly, or indirectly "analytical models", or "models" for discussing YouTube. A number of articles (several discussed herein) dealing with YouTube were found, and read – however none of the articles and papers used an analytical model approach.

2. Web 2.0 is associated with Tim O'Reilly because of the O'Reilly Media Web 2.0 conference in 2004

3. Doctors Burke and Snyder serve as professors in the Dept. of Health Education at East Carolina University. Dr. Rager is a former university professor who presently (2010) serves as CEO of a health management and consulting company in the southern U.S.

4. Co-creation was discussed in an interview given by Prof. Dellev Zwick www.yorku.ca/dzwick of York University (Schulich School) with John Turley-Ewart of the Financial Post (4th week of Oct 2009). Back in 2006, students of Prof. Hal Varian at UCLA Berkeley (quoting Dr. Ajit Kambil 1999) said "Co-creation creates a new dynamic to the producer/customer relationship by engaging customers directly in the production or distribution of value"

5. Craig Bennett wrote about the SONY cell phone 16MP camera at http://theunlockr.com/2010/10/08/sony-introduces-16mp-8-13mp-cell-phone-cameras/

6. YouTube's fact sheet for new users can be found at http://www.youtube.com/t/fact_sheet

7. YouTube was bought out by Google in October 2006 – less than 12 months after it was launched. One of the first things Google’s “tech heads” did was to re-configure the search ability of YouTube such that people looking for content could have a better chance of being successful, among the millions of videos that had been created.

8. The story of Google’s reaction to YouTube being blocked in Korea was widely reported in the press in mid-2010 – one of the sites still carrying most of the details is http://english.hani.co.kr/arti/english_edition/e_international/349076.html
9. The EFF Electronic Frontier Foundation, which describes itself as the leading civil liberties group defending your rights in the digital world. Is one of the leading defenders of the right to use short segments of copyright music for non-commercial purposes and posts a number of pages describing the legal maneuvers of the leading music labels.
http://www.eff.org/issues/intellectual-property/guide-to-youtube-removals
Bibliography


Wayne, Benjamin (2010). “YouTube is Doomed”