

# YouTube: An Innovative Learning Resource for College Health Education Courses

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## ***Abstract***

*As college health education professors attempt to engage the Web 2.0 generation of learners, use of innovative video technology resources such as YouTube can be integrated to provide relevant and targeted information to supplement college course content, create a sense of “classroom community,” and enrich the learning environment for all students – both younger and older. In this article, a general description of YouTube, its relevance to the field of higher education, examples of how it can be effectively applied and integrated into college health education courses, and some limitations and challenges of this new technology will be presented.*

**Key words:** *YouTube; Health Education; E-learning; Technology; Learning Resource.*

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## Introduction

In December of 2006, *Time* magazine published the cover story "How to Bring Our Schools out of the 20th Century," which suggests that students need to learn new skills in innovative ways.<sup>1</sup> Further, instructors need to ensure they are addressing the needs of the new faster-paced, web savvy learners, sometimes referred to as the Web 2.0 generation.<sup>2</sup> In addition, a 2006 report sponsored by the MacArthur Foundation entitled "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century" also noted that current learners are different in their interaction with media from previous generations.<sup>3</sup> The report contends that schools and instructors must teach and promote the collaborative and networking skills that students need in the social-networking Web 2.0 world.

Innovative and engaging teaching strategies are imperative in higher education courses, where the new Web 2.0 generation seeks to be engaged and motivated to learn. Creative classroom techniques incorporating technology promote a more productive and enriched learning environment.<sup>4</sup> Emerging technologies, such as the YouTube video-sharing Web site, are important for both in-class and online instructors to establish a sense of classroom community and achieve greater learner outcomes. In addition, Internet-based resources like YouTube integrate relevant content and encourage learners to reflect on how the material can be applied to settings within their discipline. This is a fresh and innovative way that speaks to their generation and learning style. For nontraditional learners, YouTube may provide the acquisition and experience of new technology and learning formats.

Many educators believe that having learners create content as part of their course requirements is an essential element to promote learning. Creating content for YouTube allows students to develop a deeper understanding of the material and provides an opportunity for experiential learning of not only the content, but the technology used as well. YouTube facilitates this content creation and has the potential to expose learners to new insights and skills, as well as engage students in online communities.<sup>5</sup>

Limited research exists on the utilization of YouTube as a tool for both educators and learners. A current search of the literature resulted in no information being found on instructors using YouTube as a teaching strategy in health education courses. This article presents an overview of YouTube and its

applications as an effective learning tool in higher education, with specific examples of its use in college health education courses. Limitations and challenges of this new technology are also discussed.

## An Overview of YouTube

Chad Hurley, Steve Chen, and Jawed Karim, three former PayPal employees, created YouTube, Inc. on February 14, 2005. YouTube provided a public-access Web-based platform that allowed people to easily upload, view, and share video clips on [www.YouTube.com](http://www.YouTube.com), and also share them across the Internet through other Web sites, mobile devices, blogs, and email.<sup>6</sup> YouTube quickly became the most widely used resource for online video.<sup>7</sup> In November 2006, within a year of its launch, it was purchased by Google, Inc., as one of the most talked-about Web-related acquisitions to date.<sup>7,8</sup>

By providing a mechanism for sharing personal, editorial, current event, or educational videos posted by users of the Website, YouTube offers the general public opportunities to become lay broadcasters. Videos can also be uploaded from previously broadcasted sources, and YouTube has struck numerous partnership deals with major U.S. broadcasters such as CBS, BBC, Universal Music Group, Sony Music Group, Warner Music Group, NBA, and The Sundance Channel for provision of video content for the site.<sup>6</sup> Anyone with Internet access can watch videos on YouTube, but user registration is required to upload a video. The posting of copyrighted material on the site is prohibited, but enforcing this has proven difficult for the company.<sup>7</sup>

According to a 2006 survey, 100 million video clips are viewed daily on YouTube, with an additional 65,000 new videos uploaded every 24 hours. The Web site averages nearly 20 million visitors per month. An estimated 56% of the users are male, with the most prominent age range being 12 to 17 years old.<sup>8,9</sup>

## Using YouTube in Higher Education

YouTube can be a valuable instructional resource, and illustrates the potential of Web 2.0 tools that learners of the current generation identify with. As a teaching supplement, YouTube can inspire and engage learners and support their digital learning style. For nontraditional older learners, YouTube may offer the student with an opportunity to

experience new technology or technology that will provide them with marketable skills for future careers. It is imperative for instructors to utilize available innovative resources such as YouTube and to help learners create content that they find relevant and engaging.<sup>10</sup> In addition, YouTube is a free teaching resource, which is an important consideration for educational budgets.

Trier<sup>11</sup> coined the term *vidcasting* which is a video version of podcasting. He found that vidcasting could be creatively integrated into classroom strategies for both learners and instructors, and has potential for involving these users in a variety of media engagements. In his online cultural studies graduate course, Trier<sup>12</sup> encouraged his learners to “cool hunt and gather” relevant YouTube and other Internet-based video clips that illustrated the weekly material being covered in the course. He also asked the learners to create YouTube playlists based on the material presented. The hunting aspect proved effective because it provided learners with an opportunity to be active versus passive in their learning process.

Through YouTube, links can be easily clipped into PowerPoint presentations, documents, or online teaching platforms (such as Blackboard or WebCT) by simply cutting and pasting the selected video URL that is displayed on the YouTube site. Users can also create a YouTube account, and download and save videos to the account for viewing in the classroom. Access to the Internet is needed for both online and in class instructors to access the video.

YouTube also offers learners who are visually or physically impaired an innovative way to learn with the aid of the learner’s own computer-assisted programming. Visually impaired learners can hear the content being covered (vs. the one-dimensional platform in which only text is presented) and physically challenged learners can access the information online directly from their PC’s.

For effective use of this technology, learners should be provided with orientation on the use of YouTube. Some learners will already be familiar with this medium; others, such as the non-traditional or returning learner, may need some basic instruction on how to access and use it. A quick tutorial on viewing video clips on YouTube is provided below. (See Figure 1) Trier<sup>11</sup> recommended creating an introductory assignment for the learners which involves a relatively simple task such as uploading a music video with commentary to YouTube, followed by an enriching and engaging discussion of the

process and/or content. To further integrate the technology, a learner Web blog could be used for the discussion.

### Quick Tutorial on Viewing Video Clips on YouTube

The steps required to view video clips on YouTube are fairly simple. The following provides a quick tutorial on how to do it:

1. Go to: [www.youtube.com](http://www.youtube.com)
2. Under the Search field at the top of the screen, enter a key word, title, or terms to search.
3. Click the Search button.
4. A listing of the titles of available YouTube videos that meet your search criteria, along with a screen shot of each video, will be generated.
5. Select the video that appears to be most appropriate for your chosen subject by clicking on the video clip screen shot. The selected video will then be played.
6. At the bottom of the video screen, you have options to pause, rewind, fast forward, enlarge the video, and adjust the volume. A timer displaying the length of the video and the running time is also displayed.
7. After the video clip ends, you will have the option to forward the clip or watch it again. Titles and screen shots of other video clips with similar content will also be automatically displayed. .
8. You can save the video clip on the YouTube website (under “Favorite” or “Add to Playlist”), or cut-and-paste the video clip’s URL from the navigation bar and use it to create a link in electronic course documents for quick classroom viewing.
9. You can access additional information on video viewing and other YouTube functions by clicking on the “Help” link, which takes you to the YouTube’s “Help Center.”

## Using YouTube in College Health Education Courses

With the rapid changes occurring in the field of health, it is particularly important that educators who are teaching health-related content have access to engaging and relevant resources to provide to their learners. Health videos on a wide variety of health topics from community and government organizations such as the American Red Cross, the

American Cancer Society, the Centers for Disease Control and Prevention, the National Institutes of Health, and the World Health Organization are increasingly becoming available through YouTube, and provide good educational resources for instructors to use in their courses.<sup>13</sup> For instance, the number of nursing program videos available on the site has grown, including a series of health education videos on flu vaccination, blood glucose testing, and cervical screening, and a series of video vignettes provided by The Commonwealth Fund that illustrate health disparities and the impact on healthcare access. Unfortunately, since considerable time is typically involved in the production of the videos developed by these organizations, the content is sometimes dated, and videos from them on currently emerging health issues may be difficult to find.

Through its vast array of video postings, YouTube provides instructors and learners with alternative or supplemental sources for timely health-related videos. For example, on YouTube you may be able to find an up-to-the-minute video clip of a government official discussing a current health issue, or of the scene of a current outbreak of an avian flu in a community, or of a personal story of an individual battling breast cancer, or of the reaction of a victim of a recent natural disaster. A YouTube video may provide a “guest speaker” for the course where one could not be otherwise be obtained, especially for in-class instructors located in more rural settings where appropriate speakers may be difficult to find or in online classes where students are scattered across a vast geographical region. Through YouTube, instructors and learners also have the opportunity to create and share their own relevant health-related clips, and discuss videos with their peers. Students may find these clips more engaging than strictly lecture-based delivered content, which may spark their interest in further exploring the topic.

Some examples of YouTube videos related to health education topics are provided below.

### ***Examples of YouTube Videos Related to Health Education Topics***<sup>19</sup>

#### **Health Disparities**

Worlds Apart: A Series on Cross-Cultural Health Care, Part 1 of a four-part series  
[http://youtube.com/watch?v=K5d\\_iPaUrWw](http://youtube.com/watch?v=K5d_iPaUrWw)

African American Health Disparities: Interview with Dr. David Satcher  
[http://www.youtube.com/watch?v=Sn8VAz\\_JaAw](http://www.youtube.com/watch?v=Sn8VAz_JaAw)

Global Health Disparities

<http://www.youtube.com/watch?v=elug1locG3A>

AIDS to Native Eyes

[http://www.youtube.com/watch?v=d2LjtIAu1\\_c&feature=related](http://www.youtube.com/watch?v=d2LjtIAu1_c&feature=related)

#### **Drug Education**

Narcotics: The Pit of Despair: Historical Anti-Drug film from 1967.

<http://www.youtube.com/watch?v=n6YV0CVP1n0&feature=related>

Drug Prevention: Oregon Partnership:

<http://www.youtube.com/watch?v=aF8WsFptUmg>

PSA - Partnership for a Drug-free America:

<http://www.youtube.com/watch?v=1B66s9EhZBs&feature=related>

Drinking Under the Influence (DUI) Prevention Documentary:

[http://www.youtube.com/watch?v=C7\\_ltiWGavw](http://www.youtube.com/watch?v=C7_ltiWGavw)

The Faces of Methamphetamine:

<http://www.youtube.com/watch?v=zmmBwUUPVd8&feature=related>

YouTube also provides learners with innovative teaching and education strategies they will most likely be using as future educators or in the health field. Having a comfort level with current technology is imperative for educators to be effective in our fast-paced electronics-based society. A report by the National Center on Education and the Economy,<sup>14</sup> entitled “Tough Choices or Tough Times: The Report of the New Commission on the Skills of the American Workforce,” shared that it is imperative that today’s learners develop a high level of competence in traditional academic areas as well as creative and innovative applications of 21st-Century skills and technologies in the areas of collaboration, communication, information literacy, critical thinking, problem solving, and global awareness.<sup>2</sup>

#### **Evaluating YouTube Video Clips**

Since not all videos posted on YouTube are appropriate for classroom use, and may contain content that is not reliable or accurate, the instructor must evaluate each video for its acceptability for use in the instructional environment.

- 1) It is recommended that the instructor first review the entire YouTube video clip for content for appropriateness of language and content.
- 2) The instructor should further verify that the video is from a valid and reliable source, such as the Commonwealth Fund, the Partnership for Drug Free America, the Centers for Disease Control and Prevention, the World Health Organization, etc. This can usually be determined from the credits listed in the video, which identify the entity that produced it. If no credits are listed, further research on the source of the video may be necessary.
- 3) Another approach to identifying whether the video is from a valid and reliable resource is to search for video clips using the resource's name in the Search field. For example, using the name "Partnership for a Drug Free America" in the Search field will provide a listing of video clips from this agency.
- 4) Instructors who use YouTube videos should post a disclaimer in their course syllabus which acknowledges that although the instructor has made a reasonable attempt to verify the accuracy and validity of the YouTube video content, this verification is limited by the nature of the YouTube environment. In addition, they should acknowledge that they have evaluated the video for its appropriateness for viewing by college-age students, but that it is possible some students could find the content to be inappropriate. Instructors should consult their department and university for policies or disclaimers relevant to the use of YouTube videos in their courses.
- 5) To help with the video evaluation, the instructor may also want to have a follow-up discussion on the YouTube clip and ask the learners if they felt the content was appropriate.
- 6) As with any online resource, it is important to ensure that anti-virus software is installed on the computer systems to protect users from any unwanted viruses, spyware, etc.

## Limitations and Challenges in Using YouTube

While YouTube offers many positive features as a learning tool, this new technology does have some limitations and challenges. For example, searching for appropriate or content-specific clips on

YouTube's huge video holdings may prove challenging, particularly if the instructor does not have an exact clip or area of content in mind. Efficiency in doing a search can be increased by entering relevant key descriptive terms and spending time searching like-topics and user-personalized YouTube pages with similar content.<sup>11</sup>

Another limitation is the accuracy and credibility of the videos that are posted on the video-sharing Web sites. As with any resource, instructors should be discriminating regarding the selection of videos to be used in their course. It is advisable that the instructor add a disclaimer to the link which indicates the content of the material is from YouTube and does not reflect the opinion of the instructor or the university. In addition, due to the unrestricted platform of YouTube, prior to making a video available to the learners, instructors are strongly encouraged to determine whether the content of the video is accurate and from a credible source, particularly for health-based information. Lastly, PC protection against Spyware and viruses is important to consider as recent reports (at time of publication) disclosed that computer hackers may be using online video sources to upload Spyware and viruses.<sup>15</sup>

For instructors who wish to avoid some of the security concerns posed by YouTube use, or do not have the time or desire to ascertain the credibility of the video source, TeacherTube may provide an alternative. Though not affiliated with YouTube, TeacherTube, which was launched in March of 2007, is a free online teacher community for posting and viewing educator-made instructional videos. Instructors can use TeacherTube for more directly related, appropriate content that does not involve searching through amateur videos. Teachers can post videos designed for classroom use on the site, and administrators can use it for professional development and teacher mentoring.<sup>16, 17</sup>

In addition to these limitations, using YouTube in educational applications also presents a few other instructional challenges, particularly from a technology standpoint. Since YouTube uses Flash video, instructors will have to ensure that current Adobe Flash Player software has been installed on their computers and those of their students. In addition, downloading and editing a YouTube video can be complex; however, external sites such as Firefox provide user guides on how to perform these tasks. All links should be checked to ensure they are currently active and in working order. Limitations that may be faced by the non-traditional or older learner will typically revolve around using

the technology itself. Because some of these learners did not grow up in a generation with daily computer use or more recent computer technologies, they may find YouTube utilization a little more challenging. These students will need detailed instructions on using YouTube especially if it is an online class delivery and may have more questions and a greater need for guidance from the instructor. However - it should also be noted that peer education is an effective learning method when students are creating YouTube or online videos in group projects.

## Conclusion

Regardless of the Internet-based video resource utilized, educators experienced with using these resources caution that it should not be used as a student “babysitter,” with the instructor assuming a passive role, but should instead take advantage of its interactive nature in the delivery of the video as well as in post-viewing and follow-up activities.<sup>16</sup> The potential power and utility of this new technology in both in-class and online classrooms is promising, when managed by an involved instructor who is sufficiently skilled in its application.

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Figure 1. Screenshot of YouTube<sup>18</sup>

