

The Longer View:

Why You Tube Matters

Why it is so important, why we should all be using it,
and why blocking it hurts our kids' education

By Marc Prensky

Published in *On The Horizon*. 2010
[4323 words]

*“Our media mediate our social interaction.
When our media change our social interaction changes.”*

– Michael Wesch, Kansas State University

“Video is the New Text”
– Mark Anderson, Consultant

One of the most exciting things about living in the twenty-first century is watching large societal and cultural changes happen right before your eyes. This is nowhere better illustrated than in the rapid rise of You Tube. (Twitter has been getting all the press lately; but its long-term import is, I think, far less.)

You Tube first launched in 2005, as a way for people to post video clips online. Who knew then that it would launch an entirely new type of communication, and that there would be such a hunger for it? I remember the email asking me to check out the videos my programmer had posted this new site. I can't say I rushed to do it. Now I couldn't do my work without it—

I include You Tubes in all my presentations. Watching You Tube now consumes a large portion of many young people's media time, often taking time away from broadcast or cable television.

The number of You Tube clips available to watch is staggering. At the start of 2010 the number is fast approaching 100 million, with roughly 150,000 new clips posted daily. (That's an additional 5 million clips per year. And that's assuming the rate stays the same; it will probably increase.)

Two-way Communication

Perhaps the thing about You Tube that is least understood by people who do not use it regularly is that it is not just one way, or one-to-many, communication; it is designed to be, and very much is, two-way. There are easy-to-use communication and feedback channels built in, including view counts, ratings, text posts to any clip, and in the ability to make and post "response" video clips, which often happens. Many users post ideas and opinions, looking for feedback, and many get large numbers of responses to their clips. Language students, for example, often post clips and get feedback from native speakers.

Quantity AND Quality

Both the quantity and the quality range of You Tube videos are breathtaking. In only the last 4 years more video has been created and posted than broadcast television created in its entire history. Particularly when you broaden the term "You Tube" to include the many specialized short video sites—Teacher Tube, School Tube, Big Think, TED, hulu and the many "how-to" video sites—you can find, in video, the entire range of human communication, from clueless kids babbling, to sophisticated discourse and dialogue, world-class creations, and deep debates and discussions. As the You Tube slogan, "Broadcast Yourself" indicates, lots of individuals are pointing a camera at themselves, many for the first time, and saying their piece. Many are young, though more and more are older people, such as geriatric1927 (aka the "Silver Surfer.") There are people making complex arguments (such as the weather woman who decries, in a You Tube, the math methodologies being taught in certain textbooks), and counter-arguments (such as a math professor's responses.) There are bereaved people with the need to express and share their feelings and who find comfort in people's responses, and there are ranters and shouters. At its core, You Tube is human communication, in all its forms (except, for the moment, synchronous dialog, which requires only the simple add-on of voice and/or text.)

“The New Text”

“You Tubes,” i.e. short, mostly self-created video clips (as opposed to professional film or television) have become, in the words of consultant Mark Anderson, “the new text.” They allow complex, multimedia communication to and from anyone with an online computer, and, more and more, a cell phone. This last is key because, given the current rate of uptake, there will soon be a cell phone available—either individually or shared—to almost everyone on the planet. Although some videos contain text, to get most of the message (even of the most sophisticated) you need only watch and listen. In many cases you don’t even have to know English, as many videos have been translated, manually or automatically, or are self-evident without translation.

Key for Educators

Why is this new communication form—short, mostly self-created videos—so important for educators to understand? The answer is that a huge portion of the world’s knowledge, especially new knowledge, is going *uniquely* into this form. There is unique video on practically EVERY subject. Banning, or ignoring this work (as often happens in schools) is saying, in effect, “We don’t want to give our students access to a large part of the world’s knowledge.”

That is clearly a tough and, I think, untenable position for educators to take.

What is most amazing (and, at the same time, alarming to many educators) is just how quickly this whole phenomenon has taken off. When people put the tools to create these videos in the hands of individuals, and created an easily accessible place to put them, as well as a relatively easy (although as yet still clunky) way to find them, no one had any idea how big the explosion would be. Who knew that there would be 150,000 people a day uploading videos they had made? Who knew that the desire to capture and share would be so great? I think this took everyone, even You Tube’s creators, by surprise. But perhaps it shouldn’t have.

Communicating Using Writing and Reading is Hard...

What many people, particularly educators, often forget (or ignore) is that writing and reading—although they have enjoyed great success and primacy for several hundred years—are very artificial and unnatural ways to communicate, store and retrieve information. As most teachers are aware, reading is a skill that is difficult, and often painful, to learn and master. Any cognitive scientist will tell you what a struggle it is to get our brains to do it

(as opposed to seeing and talking, which come much, much more naturally to humans.) “Reading does not just happen,” says University of California–Davis neurology expert Kathleen Baynes. “It is a terrible struggle.” Even after hundreds of years of learning to teach it, a great many of our students (although they can watch and listen quite well) still have difficulty with reading and writing.

As a result, a great deal of our school time is devoted to training young people to use written media—first to decode the squiggles and then to extract meaning. And still, aside from our top-tier students, we are only marginally successful at it. Many countries in the world do not even attempt to make their non-elite students written-word literate. Those like us, who do try, find the task of teaching people to read and write daunting, and the task of getting people, once they have learned, to continuously use and improve those skills, (i.e. to be lifelong readers and writers) even harder. We have a remarkably high percentage of “functionally illiterate” in the U.S.—some claim it is as much as 40 percent.

...But New Media Make It Easier

But that doesn’t mean, of course, that all these people have stopped communicating. Rather, (and this is a hard one for many to swallow) a large part of our population has already switched to media easier than reading and writing for almost everything. As noted, speaking and listening are much more “native” to the human brain. Now that we have technological alternatives, written communication, except in certain areas, is rapidly on the wane.

The evidence is everywhere. Written letters have been mostly replaced by phone calls. Most news is obtained from listening to people on TV. Even sophisticated arguments, such as Al Gore’s message about global warming (*An Inconvenient Truth*) reach far more people via movies, (i.e. listening and watching) than via books. Printed news that was once almost completely text—even the *New York Times*—is increasingly presented via graphics, “op art, online simulations and newsgames. Magazines—especially text magazines—have lost much of their readership. Newspapers, large and small, are shrinking and going out of business. And even the Internet, which, to a certain extent, brought reading and writing back into vogue through Web pages and blogs, is fast moving to short-form video, i.e. to You Tube. Much of the written communication on the web has moved to tiny forms such as Twitter, and these forms are likely to soon be replaced by voice and/or video as well.

This massive rejection of reading and writing—and substitution of other media—is, of course, not the case for the top 10-20 percent of our population (which includes almost all teachers.) But it certainly is true for the remaining 80 percent.

The Future of Reading and Writing?

So what do we do? Should educators, and society, continue to struggle—valiantly but mostly in vain—to make every person in our society literate, in the old, reading and writing sense? Or should we accept that that’s a war we won’t win and move on to a different, and more useful, goal?

Warning: If you are a person who is tied, body and soul, to reading and writing as the form of communication, don’t—repeat don’t—read this. Skip to several paragraphs down. Read on only if you are open to new points of view.

Although it is a very difficult thing for many educators and other people to hear and face, and strange as it sounds, the truth is that for most people in the twenty-first century reading and writing are *not* the best ways to communicate their thoughts and ideas. In fact, for the large majority of twenty-first century Americans they are rarely-used, and not even truly necessary skills, and are quickly on their way to becoming even less so. Let me illustrate:

What communication materials do most Americans access today? News? Video is fine. Work- or school-related material? Video does it equally well. Instructions, contracts or legal papers? Someone trusted explaining these to you on video is probably better than trying to reading them yourself. Stories? Recorded versions of the text, or movies telling the same story are (except possibly for purists) equally good substitutes. Training? Learning? Video often does the job better. Books? A Kindle or other device will read them to you. Other written pages you really want to understand? A scanner can easily read them to you (you can currently buy this technology in a pen, and it will soon be a part of our phones.) Signs? Most have moved to symbols. Place names? Again, a small device that can scanning at a distance can do the job just fine. Map reading? GPS and voice technology have pretty much solved that. Searching for information? Currently tougher, perhaps, without reading, but with voice to text and text to voice it soon it won’t be. Email? You can already hear it read. Even voting decisions are now made based almost completely on watched and spoken communication (i.e. speeches and TV commercials) and not (except for that small, top percentage of people) on reading. Bemoan this if you will, but it’s the truth.

And writing is even less-widely used. Think of the average, non-college-educated person, once he or she leaves school. Aside from signing their name occasionally, what in life do they need to write? Not a whole lot that couldn't be communicated by voice, video and pictures. A shopping list? Products already exist to record voice memos and shopping lists by talking to your refrigerator. A description of something? Voice is generally fine, and illustrations make it even better. An evaluation or form to fill out? Can be done on a touch screen with picture cues. A report? Record audio or video. The great advantage of audio and video over writing is that *anyone* can do it, i.e. anyone can stare at a mic or camera and talk. And increasingly, almost everyone does.

Whom Does It Serve?

So whom does it serve to have so many of our students struggle so hard (and typically unsuccessfully) for years to get something cogent down on paper, versus the option of learning to carefully present their thoughts in other media with which they are more comfortable and have more mastery? Are we spending all this time and energy teaching reading and writing just so that people can fill in forms and job applications? And if so, wouldn't it make more sense to just change those?

Recently, I had a conversation with a soft drink delivery person, who carried a small handheld computer on which he checked off items delivered, and printed out his customers' receipts. "Do you need to read and write for your job?" I asked him. "No, he said, that's not important." "What is important?" I asked. "Talking" he said. "Good talkers always do well."

Compared to reading and writing, we hardly focus on that at all.

There remains, of course, a relatively small group of people, in certain professions, populations and parts of society, for whom written literacy *is* important, and will clearly remain so for the foreseeable future. But that group is quite tiny relative to the number of people on the planet. And, importantly, *it no longer creates two classes, given that non-readers-and-writers have increasingly universal access to other communication tools*. It may be no different than those who can and can't speak a foreign language—there are many other ways to access the same material.

What to Do?

What does this mean for school? It probably means, for one thing, that (again as strange as it sounds) we should stop focusing on literacy, as in reading and writing (or, worse, literacies—an oxymoron), and focus, rather, on *communication of ideas*. How do we put ideas out there, clearly and succinctly, for other people, and how do we take them in? This is what we want our students to be good at, whatever medium they use.

Increasingly, people with things (even sophisticated things) to say, and intellectual arguments to make, are choosing non-written media. They are putting their thoughts and ideas into video (and other media, such as serious games) rather than writing, and sharing them on sites such as ted.com, bigthink.com, and even You Tube. Today, when searching, if one does not perform a separate video search in addition to a Google search, one misses vital information. (This despite the fact that the top You Tubes do come up in a Google search.) What might one miss? Speeches and presentations by Nobel prize winners or key business executives, for example. Even a You Tube search is no longer enough. One needs to use a dedicated engine, such as blinkx.com, fooooo.com, truveo.com, pixsy.com, vizhole.com, that searches multiple video sites. (This is only temporary. Search will soon be integrated across media.)

Use Your Phone

Today, more and more cell phones can retrieve and play video—soon almost all phones will. This puts the 100 million videos on You Tube, Ted.com, Teacher Tube, School Tube, Big Think, Wonderhowto, Ehow, Monkeysee and other useful sites in your pocket, purse or backpack all the time—available whenever you want or need them. Because much of this new video is talking heads, it works surprisingly well on the small screen—much better, in fact, than large volumes of text. As we become increasingly able to take and send (to one individual or a few) and upload (to many or the world) from our personal devices, why would we ever choose to send a written message? (Of course there are reasons for *some* people. But I'm talking about *most* people.)

The Anthropology of You Tube

One person who has been carefully observing You Tube is anthropologist and professor Michael Wesch, of Kansas State University. He has certainly opened my eyes, via his You Tubes and talks (many of which can be found, of course, on You Tube) to short video's true meaning and power. I strongly recommend everyone search for, and look at, his work.

What Wesch has principally helped me understand is the *extent* to which short video is a new way— perhaps *the* new way—to communicate, to share ideas, opinions, emotions, humor, parody with people around the world.

Scale

One of the most amazing thing about You Tube is how easily it scales from tiny to enormous audiences. One can aim to reach only a few people (Wesch estimates that a high percentage of the videos on You Tube are designed for, and reach, under 100 people), but one can also aim for, and reach, thousands, hundreds of thousands, or millions of people. There are particular ways—documented by Wesch and his students—of going about creating “viral” videos that will reach numbers in the higher ranges. Before the advent of You Tube, Wesch’s own anthropological ideas might have reached hundreds of people (i.e. his students), and perhaps several thousand in his lifetime. His books might have reached tens of thousands, perhaps hundreds of thousands if successful. But his You Tubes can, and already have, reached an audience of millions. Some You Tubes (e.g. certain songs and dances) move incredibly rapidly around the world, engendering version after version, parody after parody—not just imitation, but reinterpretation and commentary. There are already You Tubes with over one billion views. Someday soon there will be a video—perhaps a phenomenal soccer play mashed up with a highly popular song—that will be seen by almost everyone on the planet.

Many people, including a growing number of teachers and intellectuals, have already decided they can reach people better with their ideas (or reach different people) through short videos on sites like Big Think and TED than through print.

Issues with You Tube

But, of course, there are issues. Mostly they involve sorting out the good and worthwhile from the bad and “to be avoided.” Just as with all other media, there are “lowbrow” You Tubes, some with objectionable images and foul language. Few want this to become the main use of the medium, so people are quickly working out ways of automatically identifying “adult” material, in order to be able to label it, and flag it before one can see it, so that people can make appropriate choices. Already, today, many “adult” You Tubes are preceded by a disclaimer about their content.

As writer Clay Shirky points out, You Tube does not have a “content” problem, but rather a “filter” problem. The fact that we have not yet created

very good automated filters that can evaluate a video by its content, or even by the words in it, is a major issue. But there are a lot of very smart people working hard on this problem, and useful, continuously improving solutions will, no doubt, soon emerge.

Making the Tradeoffs Correctly

There is a lot of You Tube that is just one not-so-interesting person talking (typically, to less than 100 watchers.) And, as we just noted, You Tube has some objectionable material, both visual and spoken (just like all our media in a free society.) Does this justify banning You Tube in our schools?

To answer this question one must also look at those negatives against the positives of You Tube for learning, and evaluate the tradeoffs. Among the positives of You Tube—i.e. its learning benefits—are:

- An immense number of teaching videos, where someone who knows something teaches it to others. These have been created by teachers, by people in various jobs and professions, and by students and other young people. Topics range from “Using Web 2.0 to Teach Languages” to “Students Teaching Students Math.” It would be foolish to ignore the medium of video as a powerful learning tool for today’s youth. It is, in fact, mostly how they learn on their own, and one can, actually, learn entire new professions (such as how to be an online artist or developer) this way.
- A wealth of useful explanatory video on practically EVERY subject. A psychology teacher recently wondered if there were any videos of Freud’s theories of the mind—there were, to his surprise, many.
- Video-based learning matches many (if not most) students’ preference. Today’s young people generally prefer video to reading as a way of learning.
- The job of *finding* good, useful video can be a part of students’ learning. The same psychology teacher mentioned above decided to give points for the best videos found by students, rather than searching for them himself. He had useful responses within 10 minutes of posting the request, and found it more useful to have the students be the “quality filters” than himself.

- The ability for students to see, hear, and learn from, top experts in any field. This increasingly includes Nobel Prize winners, top politicians, award-winning journalists, Supreme Court justices, etc.
- The ability for students to research and view the huge and growing number of primary-source, historical videos available, such as the anti-Nazi propaganda films made by Walt Disney during WW II.
- The ability for teachers to mentor, coach and guide students through the process of viewing and reviewing You Tube videos, and to help students separate out what is true and useful from what is merely “there.”

Many school districts and educators never even make the tradeoffs before heading straight to a ban. The truth is the positives of video sites for education far outweigh its negatives (and, in addition, those negatives can be addressed through other means than bans, such as requiring students to turn off their computers if something inappropriate shows up on the screen.) To use only the negatives to justify banning You Tube and other video sites (except, of course, for porn sites) is to disregard the huge benefits that these sites bring for student learning.

Using Video to Share Teachers’ Successes

Ironically there is another group for whom You Tube-style video offers a fantastic potential solution, and that is teachers. For a variety of reasons—mostly generational—teachers typically do a very poor job of sharing their successful approaches, lessons, and pedagogies. This slows down tremendously the process of learning from each other.

Time and again teachers have shared with me great stories about good things they have done—things that it would be really helpful for other teachers to hear. Because writing (especially writing well for others) is such an effort, these stories are almost never documented in written form and posted (and thus made available to others via search.) But all it would take to make this material available is for the teacher (or their student) to point a video camera (or cell phone) at themselves and talk for thirty seconds, telling the same story they told me. They could then either upload that story as is, or if they chose, they could augment the story with comments from students, and even a shot of the class if appropriate. (It’s even becoming child’s play to fuzz out faces if necessary.) The entire process of making and uploading such a sharing video, once one had a bit of experience, would take less than five minutes, and it could, potentially, reach, and influence, millions of teachers

around the world. There are some teachers who are already doing this—there are some shared videos by teachers on using Web 2.0, for example. But this is something that *all* teachers—including college teachers—should be (and, in the future, I predict, will be) doing.

Speeding It Up

One might, of course, ask the question: “Where will the time come from for people to watch all these videos and communicate in these ways?” Some of it will certainly come from reading less, but, for many young people, it will come from the substitution of watching videos for watching broadcast TV. I have talked with teenagers who already watch no TV at all—but lots of You Tube. As online video expands to include things previously findable only on the networks, as it is already doing on Hulu, that substitution will only increase.

And, it turns out, we can also watch it faster. With tools that are very likely *already on your computer*, much video can be watched at fast-forward speeds, without changing the pitch of the voices. These incredibly useful tools are, for some reason, not highlighted, but buried deep within Microsoft Windows Media Player. To try them, when you are watching any video file in the Windows Media Player, hit “Ctrl-Shift-G” to speed the video up, “Ctrl-Shift-S” to slow it down, and “Ctrl-Shift-N” to go back to normal. You can also find a slider control for more precise adjustment (Right click to access the menus.) A speedup of about 1.4 to 2x faster seems to work best for video. It is also possible to slow any videos down for those whose comprehension is less good, or for understanding people speaking quickly or with accents. I have been arguing for years that these controls should be built into all video players, and hopefully, they, and other useful tools, will soon appear in other places. Sadly, they still do not exist on You Tube—but one can always, using a tool (such as *RiverDeep*) capture the online video as an avi or wmv file play it through the Widows Media Player.

The Bottom Line: Media Are Changing

Mainstream media do not last forever—they get supplanted whenever it is deemed better by users to do so. A thousand years ago writing supplanted memory, over Socrates’ bitter objections. Today, a new and important change is taking place. In only a few decades, television and cell phones have penetrated far further around the globe than the written word has in a millennium. You Tube, and short video in general, has, in a very short time, become a key medium for sharing and finding more and more sophisticated information of all kinds.

No one—least of all me—expects writing and reading to disappear any time soon, particularly among the intellectual classes. But as technology advances, other media are likely to take over the mainstream. This may be a change, but since little or no information is lost, it is hard to justify labeling it a “bad” one. Rather, it is only the march of progress, as information and communication changes forms (i.e. clothing) to suit the current world. Because, as McLuhan said, the medium is the message, this will bring other changes as well, to which we should remain alert.

I would expect that in the coming years, large numbers of additional video sites (along with other, more interactive forms) will blossom, containing most or all of the kinds of useful information that is now available mostly (or entirely) in print. In the education world, this will likely include student-created, teacher-reviewed curriculum-related videos and presentations that are available to all, and whose breadth and quality rapidly improves with time.

Educators who are still willing to deny or restrict their students’ access to a major communications medium—one that is filled with highly relevant educational information (and is already, although still in its infancy, embraced and used by many top thinkers to spread their ideas)—now fall squarely into that shrinking camp of people who think that the only way to protect their students from the future is to deny it to them. That seems pretty counter-educational to me.

*Marc Prensky is an internationally acclaimed thought leader, speaker, writer, consultant, and game designer in the critical areas of education and learning. He is the author of *Digital Game-Based Learning* (McGraw Hill, 2001), *Don't Bother Me, Mom, I'm Learning* (Paragon House, 2006), and the upcoming *Teaching Digital Natives: Partnering for REAL Learning* (Corwin 2010). Marc is the founder and CEO of *Games2train*, a game-based learning company whose clients include IBM, Bank of America, Pfizer, the U.S. Department of Defense and the L.A. and Florida Virtual Schools. He is also the creator of the site www.SocialImpactGames.com. Marc holds an MBA from Harvard and a Masters in Teaching from Yale. More of his writings can be found at www.marcprensky.com/writing. Marc can be contacted at marc@games2train.com.*