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Why Web 2.0 Will *Not* be an Integral Part of K-12 Education:
A Reply to Steve Hargadon

Daniel Willingham - *October 22nd, 2008* - *(Brave New Classroom 2.0)*

Will Web 2.0 be an integral part of K-12 education?

If we assume that the best predictor of the future is the past, then the answer is "no." Web 2.0 is new, but the structure and assumptions underlying its use and benefits, as outlined by **Steve Hargadon in this forum,** are not new.

At the heart of Hargadon's vision—and **Michael Wesch's**—is the collaborative student project, and this idea has been prominent in American education since 1919, when William Kilpatrick published his classic essay, "**The Project Method**." Kilpatrick and his followers would recognize most of Hargadon's list of advantages for Web 2.0 learning: engagement, authenticity, participation, openness, collaboration, creativity, personal expression, discussion, asynchronous contribution, and critical thinking. Most or all of these advantages accrue not from Web 2.0 in particular, but from its collaborative nature, and from the fact that students have a significant voice in selecting and shaping the project.
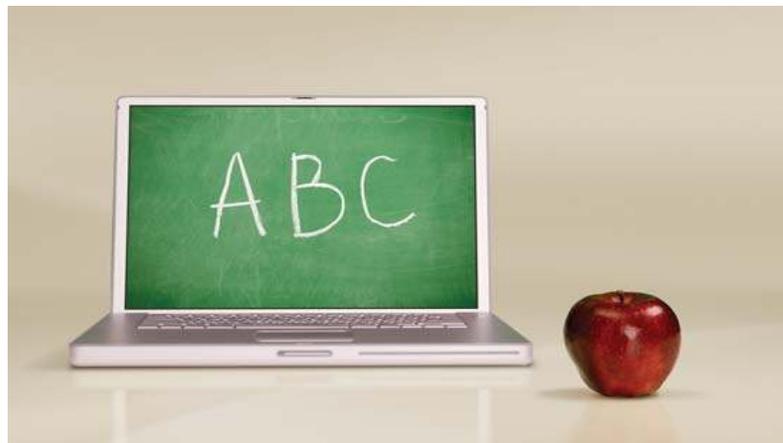
Today's K-12 teachers have been taught that projects are a good idea; their textbooks present project based methods in a positive light. Yet, recent large-scale studies sponsored by the National Institute of Child Health and Human Development show that classroom time is occupied primarily by *teacher talk*. We might expect that teachers don't use Web 2.0 projects in their classrooms because they might not have the expertise or the hardware. But why don't teachers use *some* sort of projects?

Probably because project-based teaching is really hard to do well. As Hargadon notes, the advantages are "significantly enhanced, if not dependent on, devoted adults helping to mentor and guide students."

From the teacher's perspective, there is great unpredictability in what they must know and be able to do to effectively guide such a project, exactly because the project is, in part, student-directed. The teacher must make in-the-moment decisions as to how to guide students when they get stuck, how to help them evaluate the welter of information they encounter, and so on. And it is essential that the teacher strike the right balance of intervention: too much and she will be running the project herself, too little and chaos will creep in.

Then too, teachers may struggle to align projects with content standards. A really skilled teacher may be able to engage students in a collaborative project on geometric proofs — other teachers may find that beyond them. That's why critics find it easy to **poke fun at project-based learning**. When projects go wrong, often they look trivial, either because they are not aligned to

content standards or because the teacher has softened the content demands to make the project manageable for students (and for the teacher).

Direct instruction methods are *easier to align* with content standards, and they are easier to manage in the classroom. Much of the teacher's work is in the preparation, when mistakes and dead-ends are invisible to students. There are fewer in-the-moment decisions to make during class. That's not to say that the method is superior, but there is little doubt that these methods are easier for teachers to execute, a point made by **Dewey** and by many observers since. When direct instruction goes wrong, it's usually not because it is light in content but because the lesson has become an exercise in the memorization of trivia. One might say that you could hardly blames students for inattention to a lesson that is so far removed from their interests and passions, an attitude I detect in Wesch's contribution.

It's worth remembering that traditional chalk-and-talk methods *and* project-based methods can work well. Properties inherent in methods are less important than whether or not the method is *well executed*.

If that's true, then **the question is really whether Web 2.0 makes the student project *more likely* to succeed than project-based learning did before Web 2.0 .**

Hargadon is clear-eyed in his list of challenges to making Web 2.0 an important part of K-12 education, but I think he underestimates the seriousness of his third point, "Teachers will need time and training to use these tools in the classroom."

There has been an enormous push to leverage technology in K-12 education in the last decade. The costs in infrastructure, personnel, training, and ongoing access are difficult to pin down, but conservative estimates are in the *billions each year*.

Why has technology not revolutionized teaching, but rather been a series of "computer fads," in Hargadon's term, and an all-around disappointment?

At least part of the reason is that, despite expenditures, support has been inadequate. For example, support personnel tend not to be specialized, although the technology needs of the English teacher are different than those of the Science teacher. If still more money were spent, would that alleviate the problem? It might solve the technology problem, but the inherent difficulty of executing project-based learning *well* would remain.

There will doubtless be more teachers like Michael Wesch who use Web 2.0 technology with great effectiveness. These teachers enjoy the technology and thus teach from the heart. There will also be teachers like David Cole (blogging in this forum tomorrow) who are not interested in using technology, and who are effective in the methods they use. The wisest course may not be to find "best practices" with the expectation that they will apply across the board, but rather to expect that teachers will select pedagogical practices based on their own strengths and the material they teach, and to support them in that choice.

*** *Other Posts in Forum* ***

Dan Willingham is the author of **Why Don't Students Like School? A Cognitive Scientist Answers Questions About How the Mind Works and What It Means for Your Classroom**.

DANIEL T.
WILLINGHAM

WHY DON'T
STUDENTS
Like
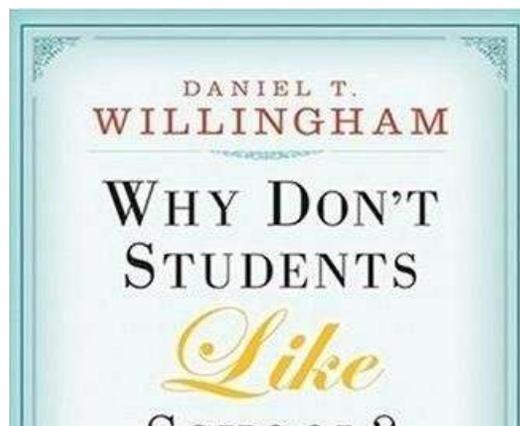
Forum Participants:

- **Michael Wesch /** Post: "A Vision of Students Today (& What Teachers Must Do)"
- **Mark Bauerlein /** Post: "*Turned On, Plugged In, Online, & Dumb: Student Failure Despite the Techno Revolution*"
- **Steve Hargadon /** Post: "*Moving Toward Web 2.0 in K-12 Education*"
- **David Cole /** Post: "*Why I Ban Laptops in My Classroom*"
- **Michael B. Horn /** Post: (title to come)
- **Dan Willingham /** Post**:** "*Web 2.0 Will* Not *be the Future of K-12 Education: A Reply to Steve Hargadon*"
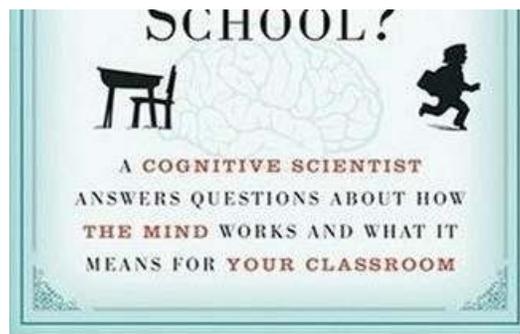
Respondents and Commentators

- **John Seeley Brown, writer/scholar** on innovation in education & other fields
- **Karin Chenoweth**, **The Education Trust**
- **Kevin Hogan**, Editorial Director, *Technology and Learning* magazine.
- **Kathy Ishizuka**, Technology Editor, *School Library Journal*.
- **Joanne Jacobs**, author, education blogger, **joannejacobs.com**.
- **Tim O'Brien,** Online Editor and Author with **O'Reilly Media.**
- **Howard Rheingold, writer, speaker**, and observer of all things digital, author of countless books, including *Smart Mobs*.
- **Joyce Kasman Valenza**, librarian, writer of *School Library Journal*'s **Never Ending Search** blog

Among many others …

Other posts by Daniel Willingham:

You may also enjoy:

- **A Vision of Students Today (& What Teachers Must Do)**

- **Moving Toward Web 2.0 in K-12 Education**

- **Turned On, Plugged In, Online, & Dumb: Student Failure Despite the Techno Revolution**

- **Brave New Classroom 2.0 (New Blog Forum)**

Posted in **Brave New Classroom 2.0**, **Education**, **Technology**
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5 Responses to "Why Web 2.0 Will *Not* be an Integral Part of K-12 Education:
A Reply to Steve Hargadon"

1. *Alan Kellogg* Says:
   October 22nd, 2008 at 6:04 am
   Teachers don't know what to do? Then teach them. Show them how to be creative, self-directed, self-motivated. Teach them how to take direction and advice from their students, instead of insisting on blind obedience. Teach them how to think for themselves,

and don't accept whining.

You don't need teachers who have to have their hands held all the time, you need teachers who can strike out into unknown territory open eyed and ready for anything.

Scenario: Third grade teacher and her class are abducted and taken to a place in the backwoods. There they are forced to strip down to their bare skin and told by their abductor, "You're free to go. But to get back to civilization you'll have to walk there bare ass naked." What does the teacher do?

She and her pupils walk back to civilization bare ass naked.

Web 2.0 is not a panacea, it is only a tool. If you don't learn to use it, it will do you no good at all.

2. ***Digital Ethnography » Blog Archive » Kirkpatrick on Education as Life*** Says:
   October 22nd, 2008 at 6:34 am
   […] Willingham has an interesting response to Steve Hargadon today in the Britannica Forum (I highly recommend both articles) in which he […]

3. ***MYBlogLog » Kirkpatrick on Education as Life*** Says:
   October 22nd, 2008 at 9:50 am
   […] Willingham has an interesting response to Steve Hargadon today in the Britannica Forum (I highly recommend both articles) in which he […]

4. ***Nancy Flanagan*** Says:
   October 22nd, 2008 at 11:16 am
   Thanks for a thoughtful post, keeping your focus on practice rather than technological bells and whistles and what they could support–if the teacher using them was capable. I agree that not many teachers are fully prepared and willing to master complex, collaborative pedagogical strategies based on real-life problems or issues, with or without Web 2.0 tools. And–for all the talk about 21st century learning–the recent direction of policy has pushed teachers further into rigid, memorized-bites curricula and "managed instruction," de-skilling and de-professionalizing teaching.

   I have seen project-based learning done well, however–and it's amazing. Especially when teachers who have mastered it can change up and do equally well with disciplinary topics best taught via direct instruction. This is the kind of multi-strategic teaching we should be aiming for; we should be urging these teachers to develop instructional uses for Web 2.0 tools that have not yet been discovered (or marketed).

5. *David Zuckerman* Says:
   October 22nd, 2008 at 11:45 am
   What I like about Steve is he lifts my heart and my eyes to what we all can do together; what I like about Willingham is his knowledgeable, deflationary, accurate depiction of the way the deal goes down these days in (most of) the schools we have. So Steve says, "This will be wonderful and transformational!, and Willingham says, "Ain't gonna happen though, and here's why."

   Proceeding from Shirky's dictum that, "Social tools don't create collective action – they merely remove the obstacles to it," I would argue that Ed2.0 needs to concentrate now on the teachers, not the students, and among the corpus of teachers, focus ONLY on those who want to try to make some change, the "early adapters" if you will. The others, some of them, will follow along in due course or they will not; but the enterprise moves forward on the energy of its best players, not on continued, and boring, Soviet-like efforts to lift everyone at once by dint of big meetings where All Teaches are obligated to come so they can receive some hours of poor teaching practice (being talked at, mostly) in the evident expectation (still!?) that somehow, this experience, the lead, will be transmuted into gold.

   So subtract 30% of Steve's effort to nail his theses to the church door and write them off as

the price of enthusiasm (God bless him), and look at the rest. (You get to choose which ones you think are playable and useful — maybe — in your circumstances and which are not) and go for it BUT ONLY WITH THE TEACHERS. When THEY (when your small groups) form into communities (Schon's communities of practice), then they may begin to roll out ed2.0 with their kids — or they may not. The tools do not make the change; they just remove some of the obstacles to what the humans want to accomplish.

And BTW, this is already going on in one context or another ALL OVER THE WORLD (http://socialnetworksined.wikispaces.com/). See, as soon as you begin to THINK about building change, you are already part of a huge and supportive community. Go for it. We have a world to gain.