

Thinking about a lack of thinking

[grantwiggins](#) July 4, 2013

Lately I have been thinking a lot about thinking.

More specifically, I have been thinking hard about the absence of thought in education. The absence of thought in students, teachers, administrators and policy-makers. This year's political discourse is a wider-world reminder of the ubiquitous lack of thought on the part of otherwise educated adults. *We know* more but are oddly – increasingly? – thoughtless. Why?

Thinking, in the sense in which I am interested, is not mere mental work (or idle mental noodling). There is certainly lots of that going on everywhere. Thinking in the educational sense is not about doing one's work. Little thought need go into a typical course pacing guide or by a student in filling in a Venn diagram. Those are mental tasks. Such work cannot by itself yield a truly thinking person.

Note that I am not saying that traditional mental work in school is easy or trivial. Learning is often difficult, i.e. you have to use your brain, work hard, and persist in the work, to learn or do whatever it is that needs to be learned or done. To learn to de-code letters or consider four different textbooks for adoption is hard; to learn French verb tenses or Stage 1 in UbD is work; to learn to effortlessly solve simultaneous equations or score tests requires a lot of sweat equity. But strictly speaking, no deep thinking is required in such work.

I can make this a bit clearer by using a different form of the word: education is the enterprise of making people more *thoughtful*. And too much mere work inhibits deep thought. Thoughtfulness only enters in when I wonder about the *meaning* of the work. *Why am I doing this? What of it? Is there a better way to do it? What does this work or lesson assume*

that we might question? What are the unintended consequences of our actions? Etc. That's why we talk about "depth" of thought. Can you dig below the surface, the 'cover' of 'coverage' to ponder what underlies it? Typically, however, both teachers and students need merely follow through, in a disciplined way, to complete all their assigned tasks. *Yours is not to reason why; yours is but to cross-multiply* captures the spirit of such schooling elegantly.

If all I do is "teach" you things and then you have to show me you "learned" then, strictly speaking, there is no *need* for *either* of us to *really* think. A need to think only emerges when the work itself is designed to make us both question, really question what we are doing.

Thus, even *good* schooling may make a "good" student or teacher even *less* thoughtful. How could it be otherwise, if we simply just do our work, and the work is time-consuming? Our students may graduate without having learned to be thoughtful and many teachers may never grow. One can get straight A's in almost every school if one merely does all the work. This is not a new idea: I am just updating Plato's Allegory of the Cave.

Consider the contrast between being thoughtful and being thoughtless. Thoughtless people lack perspective, self-criticism, circumspection; they think they understand more than they really do; most importantly, they lack self-understanding, as we have known since the Delphic Oracle.

A perfect example of thoughtlessness in education currently has to do with district pacing guides that dictate a calendar of teaching. A moment's thought would reveal that pacing always refers to outcomes, not inputs: think of what we mean by pacing in track or swimming. The issue is not the teacher's pace but the learner's. A perfectly sensible idea – pacing the learning, mindful of a key performance goal – has been utterly ruined by absurdly rigid rules about teaching. *That's* thoughtless.

WHAT IS THOUGHTFULNESS? What, then, does it mean to be thoughtful,

and how might conventional teaching and learning unwittingly undercut it? A key insight comes from what I noted above: thoughtful people ponder the meaning of what they learn and the consequences of what they do. They bring assumptions and implications of ideas and actions to the surface – and challenge them, if needed. Thoughtful people ask tough questions, of themselves and of others – and they persist in the questioning: Why? What of it? What if? So what? What are you assuming, why? Etc.

Readers should squirm a bit uncomfortably if they are honest: many of us don't like students or teachers who ask such questions a lot. I was reminded of this in a recent workshop where I praised a participant for asking a tough question and when I asked him to identify himself, half the room laughed and rolled their eyes – oh, yes, the resident skeptic, curmudgeon. And I was reminded of a kid I taught named Chris who did this all the time – a pain in the you-know-what. And as the advisor to the school paper I had to handle crises that arose because of his hard-hitting investigations as editor. I personally admired this guy's tenacity but many of my colleagues disliked his whole questioning approach to everything. He was viewed as negative. Yet Chris Hedges grew up to be a Pulitzer-prize winning newspaper writer and author. Do we *really* want thoughtful learners or just compliant hard-working ones?

More knowledge, more content mastery is thus NOT the antidote to a lack of thought, in either teachers or students. That's what differentiates me from many reformers. I don't think most so-called good schools are particularly good; I don't think "bad" schools should strive to be "good" suburban schools because most of those schools are intellectual stultifying. (As I have noted, we know from SAT data that the only thing that differentiates most "good" from "bad" schools the best is parental income, a sign that the value-added of "good" schools is questionable). More content and more mental work can never make people more thoughtful, if the lessons bypass thought in favor of mere content

mastery. Indeed, lots of knowledge without thoughtfulness makes matters worse. I don't want either eager-beaver students or teachers who merely perform well at assigned tasks. I want them to be thoughtful. Because without thoughtfulness, knowledge is dangerous. Not only is a little knowledge a dangerous thing, but lots of knowledge, with power and without thoughtfulness, is even *more* dangerous. A recent vice president comes to mind.

It's that paradox – mere knowledge and work stifles thought, no matter how important the knowledge and work – that has driven me for my entire career as student and teacher. I was bored by school, and only came alive when I studied Philosophy in an elective in high school. For the first time we were able to officially and relentlessly question what we had learned! I taught via Socratic Seminar before it had a name (based on my experience at St. John's College.) The title of my dissertation was *Thoughtfulness as an Educational Aim*. I still ponder routinely Arendt's claim in *The Life of the Mind* that most philosophers confuse the urge to think with the need to know. I always wonder about Dewey's tart comment in *Democracy & Education* that no one has satisfactorily explained why children enter school with more questions than when they leave it. And clearly this issue of inquiry-driven learning is at the heart of *Understanding by Design*.

A COMMON THOUGHTLESS COMMENT. I have also once again encountered a comment by teachers in workshops that always gets me thinking because I am unclear if they have thought about what they are saying. You may think I am referring to rude behavior. No, that rarely occurs. What always intrigues me is the comment: "There is so much content to cover, I have to cover it all." Huh? You have to teach superficially to improve learning? A little bit of thoughtfulness here should lead to some self-directed questions: *Just because I mention it, do they get it or have interest in it? Does superficial disjointed teaching really optimize learning and test scores? Must I tell them everything that is in*

the book or on the Internet – in other words am I (falsely) assuming that only teaching causes learning? etc. The essential question here is: what's the best use of precious class time, given the desired outcomes and the nature of learning? I have met few teachers who have *really* thought this question through, regardless of the external demands.

A thoughtful teacher would realize that "coverage" is not a goal but an action unsupported by clear aims. (By definition, coverage means there are no priorities and no explicit performance goals). "Teaching all the content" is not an educational goal at all; "learning to draw upon and use content thoughtfully and effectively" is the educational goal. Your job is to design backward from that goal, not march through stuff without considering the consequences.

Please don't write me saying that I don't understand tests, standards, teacher accountability, the realities of school, etc. etc. I understand. Rather, consider: this same thoughtless coverage is done by college and private school teachers working under no external test or accountability demands, and such coverage has been taking place forever. So, it can't be exactly as you are saying it. No one 'has to' cover but most do. I am asking you to think a bit about the meaning of those words. I am asking you, perhaps, to be thoughtful in the face of thoughtless demands.

Indeed, the claim that "I have to cover all the content" is thoughtless in another way. Look at the language: it is egocentric, cast only in terms of what *you* will do. But teaching is not about what you will do; I am interested in what the student will be able to do of value as a result of your teaching, because that is all that matters. Thoughtful teachers don't design backward from the content (the inputs); they design backward from worthy performance in *using* content (the outputs).

Ralph Tyler said it clearly and plainly 70 years ago:

"The purpose of a statement of objectives is to indicate the kinds of

changes in the student to be brought about so that the instructional activities can be planned and developed in a way likely to attain these objectives; that is to bring about these changes in students. *Hence it is clear that a statement of objectives in terms of content headings is not a satisfactory basis for guiding the further development of the curriculum.*" Pp. 45-6 in *Basic Principles of Curriculum*.

THINKING ABOUT OUR CONTINUING THOUGHTLESSNESS. So, none of this is original thought, as I said above in reminding us of Plato's Cave. Tyler's thought, too, is an old thought: Kant, Whitehead, and Dewey all said as much. That's what makes me think about it all. The wonder here, the true food for thought, is not that teachers everywhere and from time immemorial cover content. The thought-provoking issue here is that most educators agree with these thinkers – but then fail to see that when their work deviates from what they assented to. The truth about thoughtful teaching is accepted, then *continually ignored*. Critical thinking is praised as a goal, but the work assigned often doesn't demand it. Why? How are even good teachers blind to our own thoughtlessness? I admit I was; I admit I still fall into the same problem in workshops. That's why I de-brief every workshop; that's why I get participant feedback. I, like all teachers, have a blind spot when I am teaching. But why? How come we *keep* thinking of our job as the teaching of stuff, decade after decade, century after century? And it's not the factory model: the same error occurred for centuries before the industrial revolution. That glib answer – heard often – is just another excuse for not thinking.

In a beautiful lecture to science teachers, Richard Feynman the Nobel physicist captures both my unease with conventional education and the way forward:

There is a first grade science book which, in the first lesson of the first grade, begins in an unfortunate manner to teach science, because it starts off on the wrong idea of what science is. There is a picture of a dog—a

windable toy dog—and a hand comes to the winder, and then the dog is able to move. Under the last picture, it says “What makes it move?” Later on, there is a picture of a real dog and the question, “What makes it move?” Then there is a picture of a motorbike and the question, “What makes it move?” and so on.

I thought at first they were getting ready to tell what science was going to be about—physics, biology, chemistry—but that wasn’t it. The answer was in the teacher’s edition of the book: the answer I was trying to learn is that “energy makes it move.”

Look at it this way: that’s only the definition of energy; it should be reversed. We might say when something can move that it has energy in it, but not what makes it move is energy. This is a very subtle difference. It’s the same with the inertia proposition.

Perhaps I can make the difference a little clearer this way: If you ask a child what makes the toy dog move, you should think about what an ordinary human being would answer. The answer is that you wound up the spring; it tries to unwind and pushes the gear around.

What a good way to begin a science course! Take apart the toy; see how it works. See the cleverness of the gears; see the ratchets. Learn something about the toy, the way the toy is put together, the ingenuity of people devising the ratchets and other things.

Suppose a student would say, “I don’t think energy makes it move.” Where does the discussion go from there?

I finally figured out a way to test whether you have taught an idea or you have only taught a definition.

Test it this way: you say, “Without using the new word which you have just learned, try to rephrase what you have just learned in your own language.”

Without using the word "energy," tell me what you know now about the dog's motion." You cannot. So you learned nothing about science.

Have you taught an idea or just a definition? Have you covered a lifeless fact or uncovered a vital insight inside an inert textbook claim that needs exploration? When I see teachers (and textbooks) fixate on technical definitions or authoritative claims to be treated as Gospel I always get a chill up my spine. Because it may be just as Feynman is implying: memorization of technical terms or claims that you just accept is the epitome of thoughtlessness. Yet, in good as well as bad schools, students are expected to learn and recall hundreds of meaningless terms and textbook claims AS IF such short-term drill work ended up as transferable working capital. To assume that learning means learning what is in a textbook, *no matter how good the textbook*, is to fail to think things through.

A thoughtful teacher would *fear* the power of the textbook to lull thinking into submission, and work extra hard to counteract this tendency. Because Feynman's point is generalizable to almost every textbook or Web site: the presentation of knowledge as unquestionable information stifles thought, undercuts understanding. It slyly reduces understanding to Authoritative Knowledge. It not only simplifies but thus subtly *ends* discussion on all key points – by design. When have you seen a textbook that asked you to completely reconsider the previous chapter of the textbook? When has a textbook asked you to question the points just made in the textbook? I can think of only 1 or 2 – yet this is how real thoughtfulness is engineered by design.

Some current programmatic approaches to standards-based learning are worsening things by dividing up all the standards into 368 utterly low-level objectives that somehow are supposed to add up to a good higher-level education – even though a moment's *thought* would make you realize that this is impossible. The same thoughtlessness occurred 20 years ago

with Mastery learning. Take a great idea – mastery – then bastardize it by saying 80% or better on any dumb low-level quiz is mastery. Jeesh.

So, a thoughtful teacher always listen for a lack of understanding, regardless of the good quiz results. Thoughtful teachers realize that their goal of higher-order thinking can never be met by texts that require only low-level mental work. They count the number of high-level questions they as well as their students ask, on guard for the tendency of content-driven work to produce increasingly lower-level thinking. Most importantly, a thoughtful teacher ensures that there are questions, puzzles, paradoxes, and inconsistencies in the content, since that is how thoughtfulness is activated and strengthened – regardless of how inert and didactic the textbook is.

So, as a new year begins I want you to be a little alarmed, too. I want you to ponder the idea that well-meaning texts can cause learners *not* to think by the way we typically teach and ask students to learn. I have never met a teacher who wanted to stifle thoughtfulness. But I have met thousands of teachers who do not realize that their methods of teaching and measuring learning may unwittingly stifle thoughtfulness. Your students can only be thoughtful if you model thoughtful questioning of the content and if the curriculum makes them thoughtfully probe the content and its meaning, not just learn it.

There is a surprisingly practical pay-off here in improved test results. Really! In the 2nd part of this Essay, next week, I'm going to revisit a claim that I have made before, which I think is supported by looking at dozens of released test questions and the results from the tests: most of the "hard" test questions require something other than content mastery; they require thoughtfulness in how learners draw upon their repertoire. I will ask you to think through some of these test questions and the test results with me. You may find, as I have, that a disturbing fact exists under the radar of test-bashing: many standardized test questions are far more thought-

demanding than are most local tests (as verified in audits we have done with teachers). I trust you will find, as I do, that there is much to be gained in thoughtfully considering test results instead of thoughtlessly bashing the tests, as so many of our colleagues do.

PS: I made a few edits based on some thoughtful criticism, if this looks a bit different from when you first saw it.