

## Prof. Bonk on Microlearning

Professor Bonk: So microlearning? Your question about microlearning?

David Cutler: Yeah, exactly.

Bonk: OK. It's not a mainstream term in educational psychology as far as I know. But, that being said, it might be a term that's used by Bill Gates or Salmon Kahn or someone like that.

Cutler: Yeah.

Bonk: When they do use that word, then it becomes a global term that a lot of people use. Because millions of people, you know, watch their TED talks or listen to them speak.

Cutler: My understanding of microlearning was that this was kind of like a subset of online or blended learning. Where instead of taking an entire course, students could just take, you know, what they wanted to learn right then and there. And learn it in seven minutes, rather than having to take an entire course online.

Bonk: Yeah, well, it seems like it's an offshoot of online learning. It's a term that's come about because of the popularity of online learning. In particular, the Kahn academy kinds of things. So someone had to coin a word other than flip classroom, I guess.

Cutler: Yeah.

Bonk: You know? Because not everybody's flipping their classroom. You could be self pacing yourself through something that's not got to do with anything about a particular class. There are cons to the word microlearning. Let me start with the cons, then we'll go to the pros.

Cutler: Sure.

Bonk: The cons include a narrow mindset in terms of what learning is. And it decompartmentalizes the contextual cues that we pick up on a social plane, and the importance of a social cultural viewpoint on learning. The fact that we learn with our peers. The fact that we collaborate. The fact that we internalize the strategies that we see used by others.

So it takes us almost backwards in time to a behavioral model and thinking that we can shape people through short pieces of training, and they will move towards some kind of end state that we envisioned for them. You know? We can set up a series of short teachings, microlearnings, and gradually get them to, you know, that end state or goal. And that kind of narrow focus...

Cutler: Sure.

Bonk: Is thought [audio distorts]. So this perspective, microlearning, is taking us, I think, away from thinking about the whole person. Thinking about the whole context. Thinking about the entire situation, or the whole discipline that one's trying to learn. And for the learner themselves, they will lack a larger perspective. They will lack synthesis. They will lack a sense of the macro structure of a field or discipline if everything's a lot of little teaches, OK?

Cutler: Yeah.

Bonk: So if you want to learn how to spell a certain sentence in Spanish, yeah we can do some microlearning pretty quickly and ramp you up, you know. But will you really understand what you're saying? Will you really understand when to say it, and how to say it, and the contextual cues in that environment? Will you misuse the language because you missed some subtle cues from others there?

On the other hand, on the flipside, I think it's a useful term for understanding these short pieces of information that are going to become available and are available through e-learning and blended learning environments. It provides a language, a term. The problem becomes if we use it as the term. And, you know, everyone looks at that as the solution for educational ills. And like I say, it takes us back almost a hundred years in psychology, in some ways. Not fully.

There's another way to look at it and that is you can look at it from standpoint of personalizing learning. And providing the short bits of knowledge when you need it to help guide you through along the way. When you're struggling something might come up to help you out, to ramp you up, to overcome some difficult task that you're currently facing. And that could also help your self esteem and your confidence, knowing that there's a little piece or a nugget that's there if you need it, but you don't have to use it right away.

Also gets us into the motivation literature. Those people, as Carol Dweck's book points out, we have people of fixed notions of intelligence, and growth versions of intelligence. And people who are fixed, you know, might not see the utility of microlearning for them. Or might not see it in the same way. People who have growth versions of microlearning might wait to use that piece or that nugget until they've exhausted all their challenges.

Whereas those that have fixed notions of intelligence, if they don't solve the problem initially, they might give up and go to the microlearning and use it as a cheat. See what I'm saying?

Cutler: Yeah. Yeah. No, I understand.

Bonk: And they might not move beyond where they currently are because they've become reliant on that support structure. Who weans them away from the micro-learning? If it's always available for you in algebra or in geometry, some little hint or cue, well then, you know, I can make it through this class and get my A- or B+ and be happy with it. Because the system's going to help me get that far. I don't have to push myself beyond that.

That's another way to look at this. OK? A third, another... As I mentioned, another way to look at it is personalizing learning. And that is, you have all sorts of media elements online and available to support your learning whenever you need it. And that might help me bootstrap me up from someone who's a novice and not really aware much of, you know, calculus or trigonometry, to someone who's at least moderately savvy with some aspects of it and can push on from there.

So, I mean, there's many ways to think about how all these little snippets of learning might come in to play in a learning situation. You know, I don't want to be totally negative, because there probably are more pros than cons here. Because of the dire need we have in education to help people in anyway possible. The problem becomes over-reliance and misunderstanding of how to use it, and not having a theoretical perspective or a teaching philosophy from which you're using it.

Finally, there is a need, if you're doing a lot of microlearning, there's a need for macro experiences. Who's going to provide those? And are we going to then have counselors/remember my super inventors and counselors in *The World is Open* book.

Are we going to have some kind of e-learning or personal learning guru that you go to every once in a while to reflect on all the microlearnings that you had to get you to reflect on your learning. To get you to debrief on your learning. To get you to synthesize that learning experience and to see your personal growth and where you haven't grown and where you might go.

So yeah, it's all well and good to have more opportunities to learn when you need it at the right time. Just enough stuff, small snippets and all that. That's all great, but that's just learning. That's not personal growth, you see? And you need both. You need both. You need to develop as a human being over time. So there has to be some kind of way built into the system for meta-reflection. Meta-explanation of your learning.

Cutler: Meta-cognition, no? Like...

Bonk: Well, meta-cognition is part of that.

Cutler: Yeah.

Bonk: Meta-reflection. You need to... Hopefully when you're using these bits and pieces there's some kind of reflection point. So you're thinking about your plans, your goals, you're self monitoring your learning.