In Adult Education, Small is Beautiful

By Steve Bookbinder

At some point, most adult learners have a strange experience. They choose a course whose title and content seem interesting, and find that its delivery falls flat.

Somehow, the instructor fails to engage a motivated participant. Almost nothing sticks, despite the fact that most or all of the students may have been keenly interested in the topic to begin with. If they don't (or can't) transfer out of the class ... they simply suffer through it. Either way, they often find they are unable to recall many, or any, potent details that the instructor shared.

Why does this happen? Research suggests that at least part of the answer lies, not in the content of the course, but in instructional design and delivery.

"Withdrawal and unsuccessful completion appear to be associated with a number of different aspects of teaching and learning ... (including) uninspiring, "boring," or poorly structured teaching ... (and) inadequate or poor course design." -- (Martinez, 2001)

"Effective learning involves participation." (Bahr & Bodrero, 2012)

Many adult education settings offer strong content. Not all of their courses, however, offer instructional design and delivery that actually engage learners and get them to participate actively. So: What are the specific instructional design flaws that leave students with little or nothing to show for the investment of their time and money? We wanted to know, because we wanted to build an enterprise whose whole driving purpose was creating and delivering engaging, effective course content for adult learners.

We found that the best current research now points toward three major flaws in delivery that, independently or collectively, adversely affect the ability of adults to learn. Those flaws are:

* Flaw #1: Cognitive Overload
* Flaw #2: Overreliance on Elaborative Studying
* Flaw #3: Insufficient Self-Pacing

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INSTRUCTIONAL DESIGN FLAW #1:
COGNITIVE OVERLOAD

> *"The 'small-bites' methodology involves the use of short videos, voice broadcasts, text messages, small addresses and e-mails to deliver bite-sized pieces of training material to the employee, which he/she can easily understand and apply immediately in his/her performance. The ratio of employee attention vs. the amount of information to be processed is much higher in this process at every instance of training-download. Allowing gaps in between these small "bites" provides for "watch-periods" where the employee gets a chance to immediately apply what he/she has learnt, and the trainer can immediately assess the effectiveness of the download given to the employee." (Gupta, 2012)*

Cognitive overload, the stress-driven "cramming" experience, is often the unintended result of a "big bites" teaching philosophy, which holds learners accountable for large portions of uninterrupted instruction or study without an immediate opportunity to apply what they've learned. A "small bites" approach to adult education, by contrast, would require the instructor to break the content down into concise, easy-to-assimilate chunks, and cover only one of those chunks at a time before allowing time for practice or application.

This "small bites" philosophy assumes that the student should receive only as much information as he or she can comfortably engage with in a single attempt. When that small bite is completed, the student can move on to the next bite.

The one-way, "big bites" lecture is still the primary teaching tool for many instructors, despite the fact that there is ample research suggesting that it is a deeply inefficient way for adults to learn. (Gupta, Bahr & Bodero, et al.)

What if, instead of lectures, videos, or lengthy reading assignments, we planned our instruction in terms of miniature, largely self-paced content bursts, with small breaks in between each burst? This way of teaching carries major benefits. (Gupta, Bahr & Bodero, et al.)

INSTRUCTIONAL DESIGN FLAW #2:
OVERRELIANCE ON ELABORATIVE STUDYING

> *"Educators rely heavily on learning activities that encourage elaborative studying, whereas activities that require students to practice retrieving and reconstructing knowledge are used less frequently. ....practicing retrieval produces greater gains in meaningful learning than elaborative studying with concept mapping." (Karpicke and Blunt, 2012)*

Human beings learn by taking action, yet many educators in the field of adult education still requires learners to create notes or outlines based on "study" or "review" written material in a textbook or manual. Some people have learned to get good results from this method, but for many others it only summons up memories of previous unsuccessful learning attempts. Instructors could help participants to retain and use more information if they used the same time period to give brief mini-tests based on material already covered in class.

Giving assignments that require students to read or reread long texts and then create intricate written notes and outlines may be appropriate in some settings, but the evidence now indicates that it is simply not as effective as a series of quizzes on the same material.

Retention is higher when learners take a test than it is when they study or wade through written material ... even if they never learn how well they did on the test! (Roediger and Karpicke, 2011) At our company, we have gotten impressive results by emphasizing short (five-to-six-minute) lectures over long ones, and four-question quizzes over lengthy "final exams." The results, which mirror those of clinical studies (Pyc and Rawson, 2010): More engaged learners and better retention of the content.

INSTRUCTIONAL DESIGN FLAW #3:
INSUFFICIENT SELF-PACING

"Learners who take the initiative in learning and are proactive learners learn more and better than passive learners (reactive learners). Proactive learners enter into learning more purposefully and with greater motivation. They also tend to retain and make use of what they learn better and longer than reactive learners. The independent learner is one who is more involved and active within the learning process. Online learning supports the self-directed learner in pursuing individualized, self-paced learning activities." (Illinois Online Network, 2012)

Many instructors are still in the habit of announcing, in so many words, "Welcome to our class, this is the schedule. This is what we're doing. This is how we're doing it. This is when we're doing it. Deal with it." If a participant has a scheduling problem, or needs some kind of adaptation, it's the participant's job to resolve the issue. The final exam, or whatever, isn't moving or changing. This approach demotivates learners, leads to lower retention rates, and creates ongoing cultural problems in our teams.

Assuming that you have a motivated learner, then the more adaptive the schedule is, and the more proactive control the learner has over his or her own process, the better the results are going to be. On the other hand, if you don't have an engaged, motivated learner, you've really got nothing.

A major advantage of the "small bites" approach, particularly when content is delivered via the Internet or some other self-paced medium, is its ability to synchronize with a self-paced learning cycle. (Gupta, Bahr

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& Bodero, et al.) Once a motivated learner can access an instructional plan that allows him or her to learn across multiple platforms, set all or part of his or her own schedule, and pursue small chunks of material at his or her own pace, retention improves. This has been our experience, at any rate.

By improving delivery, breaking training into self-paced, easy-to-navigate content bursts, and relying more heavily on the Internet, we are seeing:

- Solid retention, thanks to shorter and more frequent assessments;
- Deeper engagement over time, including voluntary engagement with new course content;
- Much more aggressive implementation of the concepts shared, whether participants are seasoned salespeople or newcomers to the profession of sales; and, last but not least,
- Higher revenue and commission figures.

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Steve Bookbinder is co-founder and CEO of Digital Media Training. Steve has decades of direct sales experience in advertising, training and consulting services as well as sales process development. He has led new business sales teams at one of the largest global internet companies, founded a global search marketing company and has been a thought leader for a global sales training company.

 Steve has delivered more than 2,000 workshops and keynote addresses. He has trained more than 25,000 sellers and sales managers globally. Clients include industry leaders across a wide range of verticals such as finance, banking, insurance, technology and telecommunications. In addition, he has written and co-written more than 25 books, articles and audio training programs. Leveraging his background as an actor, athlete and swim coach, he infuses each presentation with humor, insight and a passion which is contagious.

References

Bahr, Kim, and Bodrero, Rebecca: *Case Study: Engaging Learners in the Synchronous Distance Environment,* 2012 http://www.learningsolutionsmag.com/articles/824/case-study-engaging-learners-in-the-synchronous-distance-environment

Brink, Julie: *Improve E-Learning with Chunks and Bits,* 2010 http://trainingmag.com/article/improve-e-learning-chunks-and-bits

Gupta, Rajan: *Learning & Development in Small Bites,* 2012 http://www.executionmih.com/learning-training-development/small-bytes.php

Illinois Online Network: *Instructional Strategies for Online Courses,* 2012 http://www.ion.uillinois.edu/resources/tutorials/pedagogy/instructionalstrategies.asp

Karpicke, Jeffrey D. and Blunt, Janell R.: *Retrieval Practice Produces More Learning than Elaborative Studying with Concept Mapping,* 2012 http://www.sciencemag.org/content/331/6018/772

Malamed, Connie: *Chunking Information, 2011* http://theelearningcoach.com/elearning_design/chunking-information/

Martinez, Paul: *Improving Student Retention and Achievement,* 2001 http://dera.ioe.ac.uk/4007/1/Improving%2520student%2520retention%2520and%2520achievement.pdf

Pyc, Mary A. and Rawson, Katherine A.: *Why Testing Improves Memory: Mediator Effectiveness Hypothesis*, 2010 http://www.physics.emory.edu/~weeks/journal/pyc-sci10.pdf

Roediger, Henry L., and Karpicke, Jeffrey D.: *The Power of Testing Memory: Basic Research and Implications for Educational Practice,* 2011 http://pps.sagepub.com/content/1/3/181.abstract?ijkey=feb46a41655abc371a43d34f166798d881df412d&keytype2=tf_ipsecsha