Nano-Learning: An Exciting New Tool for Professional Development

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May 2015

The debates are common. Educational styles in conjunction with learning styles make for one long leap in trying to create something that falls into the "one size fits all" category. From a prestigious four-year degree to the ongoing classes one takes in the school of hard knocks, everyone learns differently. Both mediums should and will persist, but we are always on the lookout to add to the mix so that no one gets left behind. Enter nano-learning (a.k.a. micro-learning).

Good Things Come in Small Packages

First, the concept of nano-learning is not new. It has been around awhile, but our profession is taking strides to legitimize the concept. Technology has fast-forwarded the concept into an easy reality. There is a reason why Twitter messages are limited to 140 characters. You really can get a lot of information out in few words and/or minutes. An analogy that stands out in comparison is that of a strategic plan in a corporate environment. Surely you have seen some epic ones in your experiences – page upon page of words, charts and graphs that are often bypassed to get to the meat and potatoes at the end. While many strategic plans have come and gone, one must wonder how many actually got read, let alone had taken the first step toward implementation. Years ago, I was fortunate to be able to help implement a two-page (front and back) strategic plan. It was short and sweet. To the point. Guess what? No one asked me to summarize it for them. Most importantly, it was followed because it was *known.*

A quote from Mark Twain fits here well, *"I didn't have time to write a short letter, so I wrote a long one instead."* Take the time to make your message short. It will stick and live on. Translate this analogy to any given CPE course that you have taken, or when your firm hosted such an event. With no disrespect to the presenter or their ability, do you think that session could have been reduced in time and content, yet still deliver the intended value? If done right, certainly.

This is the path we are taking, and more and more people are getting on the bus – especially the younger generations.

Perceived Value

What can really happen in 10 minutes? For those of you that might ask, the better question might be "What really happens in 50 minutes?" (or in an hour-long regular old CPE class on any subject). Content may be king, but in any given training session the main points can usually be summarized in a few sentences or a few minutes, no matter what the medium might be.

Ten minutes is what the accounting industry has determined is good for credit. Generally, though, learning in this method can be in minutes, or even less than a minute. The presentation of the concept with appropriate support and reinforcement is the total package.

Nano-learning, or micro-learning, can be defined easily. It's the packaging and delivery of educational content in short increments – around 10 minutes. Ten minutes would probably be the max.

The term nano-learning is relatively new to me, and may be to you as well. However, it has been around for a while and may be sticking more in our industry due to support from state societies and accountancy boards.

Ohio and Maryland are taking the first steps toward this concept, and will be offering CPE in 10-minute increments. They have done the research, have proven the concept, and should lead the way for other states and their respective CPA societies and accountancy boards to follow suit. While these two states may be leading the pack, NASBA is right on their tails and incorporating nano-learning into its new CPE guidelines.

The Ohio Society of CPAs is the first state society to launch a series of nano-learning courses that provide timely knowledge in 10-minute increments called *Quick Byte.* The description around this new offering is explained in the following way by OSCPA:

The new learning resources are responsive to the changing dynamics of today's business environment. CPAs operate in a complex world of rapid-flow information and technology. Time is at a premium, yet they need quality learning resources they can quickly absorb and immediately apply to real-life business challenges.

"The nature of professional education is changing," said Scott D. Wiley, CAE, president & CEO. "Studies show micro-learning can provide the quick, focused education that CPAs need to stay current in the market place."

The shorter video format is convenient and ideal for an increasingly digital audience to digest. That can mean higher retention rates since topics are pared down and targeted specifically on concepts the learner needs to know right now.

Granted this format is new and so is official training offered in the format, so success cannot be extrapolated just yet. We wouldn't suggest that success of nano-learning is based on the sales of these courses from Ohio or any other state society. Let's take a look at a completely different angle on an offering: maybe it can be used for an event, and is something you create in house. Maybe it's a 10-minute screen capture or video about how to use pivot tables in Microsoft Excel. Or it could be a similar video on how to run the most used reports in your time and billing system. The bigger picture is about getting the education you need, whether you generate the content or some third party does. It can be good for CPE credit. It is all about learning in quick bursts – and *timely* ones at that. It's learning on demand, when you need it.

The National Association of State Boards of Accountancy provides resources and guidance to the state boards that play a key role in regulating the accounting

NASBA expects to have final standards approved in the fall of 2015, with a January 2016 implementation date. Once the NASBA standards are approved, you should expect many states to quickly jump on board and approve credit for nano-learning.

profession, including continuing education requirements. In its draft of the revised standards on CPA, NASBA included guidance on nano-learning and the requirements of granting CPE credit for learning objects as short as 10 minutes. Accreditation will be a big drive of adoption. Learning and talent management professionals have long advocated the need for job support resources that provide, among other things, targeted, contextual learning. Leading businesses in other industries have been building performance support resources for years, but the accounting profession has not followed suit. Firms have been hesitant to make the investment, typically citing the fact that nano-learning does not qualify for CPE credit. As more states begin to grant CPE credit, expect the debate to heat up and for more firms to begin to incorporate nano-learning into their professional development plans.

Why Incorporate Nano-Learning?

It is very tempting to go down the path of generational issues in this debate. "Young kids these days – they are so pre-occupied." You know the rants. Truly, though, we all have some degree of patience, or lack thereof, when it comes to extended periods of training. I remember years ago putting on events and being "upset" that people would be sitting there reading the newspaper (yes, I'm old) while a quality show was in progress. Were we boring them? The fact is, no matter how engaging, exciting, captivating (or you name the verb), it is hard to

keep people's attention for an extended period of time. Or, is it just hard to get people to listen? Either way, nano-learning is not a band-aid or an excuse for a greater problem; it should be looked at as a viable alternative and possibly, the new norm.

Active listening seems to be a lost art. Maybe it went away after the introduction of the marriage sacrament, as the husband seems to never listen to his wife. It is a component of so many leadership-training regimens, specifically referenced in [Habit #5](https://www.stephencovey.com/7habits/7habits-habit5.php) (https://www.stephencovey.com/7habits/7habits-habit5.php) of Stephen Covey's *7 Habits of Highly Effective People*. It is important, but people still don't do it well and enough. If we simply lessen the time associated with training, we will naturally reduce the onset or likelihood that concepts will be grasped without the participant drifting off to a galaxy far, far away. Or, back to reading the newspaper . . .

This type of training is not being suggested only for those people with short attention spans, it can and will work for all types of learners.

The goal of any professional education program is to improve job performance, and nano-learning is no exception. All modes of delivery have their strengths and weaknesses. Traditional instructor-led training courses enable participants to engage with and learn from each other and to practice skills with case studies and other learning activities. But this type of training takes time to develop and is thus poorly suited to address rapidly emerging issues that demand immediate firm wide response. Instructor-led training requires the participants to adjust their schedules to accommodate the training calendar and possibly to travel to the training location.

Webinars are relatively inexpensive to produce and prep time is minimal, making them a good choice for emerging issues. Most importantly, webinars can be delivered remotely, reducing travel time and costs. Under certain conditions they

may be recorded and archived and made available for CPE credit at a time that is more convenient for participants. The downside of webinars is they are non-interactive (or marginally interactive at best) and typically do not include any learning activities. They tend to be all lecture, which limits the level of learning the participants can expect to achieve.

Nano-learning is not a replacement for traditional modes of learning. You won't replace your firm's staff-level training programs with 24 hours of nano-learning. Instead, nano-learning should be a supplement to existing training programs. Nano-learning has specific strengths that, when added to existing training programs, will make the firm's learning as a whole more effective.

Nano-learning enables your firm to:
- Drill down and provide guidance on detailed, job-specific tasks or knowledge requirements
- Provide contextual just-in-time learning, which improves retention and job performance
- Respond to quickly emerging performance weaknesses that cannot be addressed adequately through other delivery modalities.

Besides improving learning outcomes, a robust nano-learning library can help differentiate the firm in its recruiting efforts. Surveys of accounting students consistently show that training ranks near the top of what students look for when choosing a firm, just below compensation and opportunity for advancement. A modern, progressive learning program that responds to their preferred learning style may help convince the best recruits that your firm is the best fit for them.

Just-In-Time

The "just in time" (JIT) referenced here is not just the fact that this learning method is now legitimized by the powers that be; it also refers to another of the

trends originated in Japan more than half century ago. Lean Six Sigma is a common term in the business world, and more recently in the CPA profession as encouraged by the likes of Dustin Hostetler with Boomer Consulting. Sure, you have heard of Lean Six Sigma, but have you heard of JIT? Better yet, do you remember it from your college course on operations management? That is where I first heard the term.

JIT is a production strategy that strives to improve a business' return on investment by reducing in-process inventory and associated carrying costs. It is intended to achieve continuous improvement.

Outside of pencils and paperclips, CPA firms don't have much inventory. The focus of JIT in a CPA firm learning comparison is simply the "just in time" part. Instead of delivering product to customers just-in-time, versus sitting on the shelf collecting dust (and obsolescence), you get just what you need, right when you need it. The alignment with nano-learning is that the size is compact enough to interject education at a convenient time. It can be fit it in after your late morning client meeting and your noon mentoring lunch with staff. We all complain about time, and the lack thereof, but the convenience of this alternative lends itself to usage, versus the consumption of a one-hour webinar or an all day off-site event.

Who and What

The two most important strategic choices you will make are "who" and "what." These decisions must be made early on, for they will drive other decisions and ultimately serve as the foundation for improving the chance your initiative will succeed.

- *Who* requires you to define the audience you will be targeting for the learning.
- *What* addresses the subject matter in general, but more specifically, the learning objectives. Too often, new learning initiatives (e.g., webcasts, e-

learning, leadership training) fail because insufficient consideration was given to the choice of "who" and "what." Make conscious choices. Courses build for everyone are courses built for no one.

Tips for choosing who and what:

- A small but supportive audience is better than a large but skeptical audience. Ultimately, you want to drive firm-wide adoption. You stand a better chance of achieving that goal if you start with a smaller segment of the firm that "gets it." Start with an audience that is going to be invested in the success of the program and will tolerate the inevitable early missteps. Build early success and supporters to leverage for firm-wide rollout.

- Create verb-oriented, job-specific learning objectives. What do you want learners to be able to *do* as a result of participating in the nano-learning event? If they successfully perform these tasks how will their job performance improve? How will the firm benefit?

- Think holistically. Understand how your nano-learning library will integrate with other learning programs. Will the nano-learning be a complete supplement to existing programs, focusing on topics that aren't addressed in existing training courses? Will nano-learning be used to provide post seminar just-in-time job support to reinforce key ideas from earlier training. Or will they be used as advanced preparation to live seminar events?

- Choose topics that get a lot of attention from other sources, e.g., pending tax legislation, new accounting pronouncements, other high-visibility firm initiatives. These other initiatives will make the nano-learning objects more relevant and you can piggyback on the buzz generated by these external events to drive awareness of the library.

How? Part 1: The Courses

Producing effective e-learning requires the following.

- Technical content
- Instructional design
- Authoring tool
- Delivery platform

One of the firm's subject matter experts will typically provide the technical content. In addition, the SME also will be helpful in defining the learning objectives and performing a technical review of the course after it has been produced.

Instructional design is critical. Without proper design, the learning will not be as effective as it could be. Regardless of technical accuracy, if the material is not presented in a way that allows the learning to actively engage in the material, comprehend and apply it, the training will not be nearly as effective in driving behavioral change. Your SME will know *what* to teach, but an instructional designer will know *how* to teach the material so the learner will understand, retain and apply the material on the job. E-learning—much more so than instructor-led seminars—requires sound design to be effective.

The "what" and "how" of learning are two distinct skill sets, and the creation of effective learning requires both. At a minimum have an instructional designer design a set of templates for in-firm personnel to use when creating content.

An authoring tool is to e-learning what PowerPoint is to slideshows. It's a content development platform. Before you go down the budget road and say no funds are available, this software can be CPA firm budget friendly (FREE). Free software can come with a non-cash price, though, in terms of advertising. Therefore, a worthy investment may be in software such as [Camtasia](#)

(http://shop.techsmith.com/store?Action=buy&Locale=en_US&SiteID=techsm&productID=289432000) – at about $299. Software such as this give you the ability to create your own short videos, produce them and share them with your team. The process of saving and sharing allows them to watch at their convenience. You don't need to be a video expert, nor do you even need to include video! The video can equate to a screen recording you make of steps on your computer – with a little bit of narration to go with it. Long gone are the days of expensive equipment and rare skill sets to mix, edit and create elaborate productions. These videos are short and to the point and your production skills will certainly expand, as do the number of videos you produce.

Rather than producing the e-learning yourself, you may engage a third party e-learning developer to produce the content for you. You may find that the costs of paying a third party are worth the time, rather than the hassle of creating the courses yourself. As the nano-learning initiative becomes successful, you may have no other choice but to engage a third party to keep up with demand.

Delivery Platform. You should plan on delivering your nano-learning through your existing LMS. Having a separate system for delivering nano-learning will create record-keeping nightmares. Most modern LMS should have no problems delivering courses that were created on any of the popular authoring tools. Be sure to test both the uploading and the delivery of a completed course prior to releasing it to your catalog. Make sure it works.

With this route of production, the other means of training delivery stay with classic types of training content. It hardly makes sense to have people gather for a lunch-and-learns in the conference room and bring in ham sandwiches for a 10-minute show. However, it may be such that you still do a similar event but group several small live events of under 10 minutes. For example, doing three to four over the course of an hour to allow for plenty of time for breaks to keep the "integrity" of the concept in place.

The How, Part 2: Getting Your Nano-Learning Initiative Off the Ground

A new learning initiative such as the launch of nano-learning is not really a learning initiative. It's a change management initiative. Nano-learning is a significant departure from the way your firm professionals consume learning. In order to take advantage of what nano-learning has to offer, everyone at the firm will have to change some deeply ingrained habits.

Keys to a successful change management initiative include:

- **Obtain buy-in and the active support of firm leaders**. The support of firm leaders is absolutely critical if a change management initiative is to succeed. To obtain buy-in and support you will need to make a business case. The business case doesn't have to be formal, but you should be prepared to answer convincingly questions such as:

    - How much will it cost, both cash paid to third parties and time required from firm professionals
    - What is the development and delivery timeline?
    - What has to go right for the initiative to succeed? What are the critical success factors?
    - What are the challenges and risks to achieving success and how will these be mitigated?
    - How will you make sure people take the courses? If you build it, how do you know they will come?
    - How will you measure success? How will the firm measure the return on its investment?

- **Build a team and a core group of early supporters.** A single person can champion a change management initiative, but one person, no matter how talented, can do everything that is necessary to be successful with an

initiative as complex as launching a nano-learning library. At a minimum, the project team should include a subject matter expert (preferably from the group that will be one of the early adopters) the firm's CLO or Learning Manager, a representative from the targeted user group.

- **Communicate repeatedly.** You and the project team will "get" nano-learning. Intuitively you understand the cost and benefit of the nano-learning objective. As you work the initiative you will become even more deeply entrenched. Remember that others in the firm are far behind your level of understanding. You will have to end up spending almost as much time communicating as you will building courses. In the beginning you will need to work to drive awareness of the initiative and the value proposition. You will need to communicate the launch, and keep communicating to drive usage. You will need to repeat your message over and over again before people really "get" what you're talking about.

- **Plan for some quick wins to build on.** Success breeds success. Get your initiative off to a strong start that you can highlight to help build support and momentum. This is one of the reasons why the choice of "who" and "what" is so important. Pick something small and easy to execute to do first. Put your best people on the project. Secure all the resources necessary and don't try to do it on the cheap. It can literally take years to recover from a major failure right out of the gate.

What is lost?

If education is being crushed down to these small increments and is still providing value, what has been lost? If nothing were lost, we would have gone down this road a long time ago, right?   I believe the "content" that is lost, potentially, is the *storytelling*. By storytelling, I'm not talking fairy tales or fiction. Most learning is taught or reinforced with storytelling or example. Real life always

tends to make things stick better. This is the art that great teachers possess. By no means does it have to disappear in nano-learning, but surely needs to be minimized.

In Summary

One thing that has not changed in our ever-evolving world is time; we all get 24 hours in one day. We must do the best we can with this precious resource. Nano-learning is merely the formalization and validation of something that has been happening in our profession over the years – adding more training into a smaller window of time. This article is an introduction to the topic that will hopefully become a part of your overall learning strategy. We hope you use this as a springboard to integrate this officially new form of learning uniquely at your firm.

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