
Learning in traffic

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The microlearning revolution

Two years ago I loaded Duolingo on to my phone to learn a few sentences of conversational Spanish before a holiday.

With the help of its mascot, a little green owl called Duo who pops on to your screen to encourage you to keep learning, Duolingo combines bite-sized lessons of vocabulary with clever gamification. With more than 300 million users, it's the most popular language-learning platform and the most downloaded education app in the world.

I was hooked in about the time it took me to say the girl eats the apple in Spanish (la niña come la manzana).

While there's no official definition of microlearning, all microlearning-based training shares one key characteristic: brevity.

Whether text or full-blown interactive multimedia is used, content can take a wide variety of forms. Like Duolingo, the best-known platforms include some kind of gamification (the use of badges and rewards) to make learning more engaging. What's unequivocal is that the convenience of this kind of learning has swept the world.

However, microlearning isn't just sliced and diced content. Shannon Tipton, E-learning expert and author of *Disruptive Learning: Discover Your Inner Learning Rebel*, explains that rather "It's a strategy where independent learning units work for a single purpose and are part of the total learning picture."

Some of the most popular examples of high quality microlearning include Khan Academy, short education videos like TED-Ed and language learning services like Duolingo. What they all have in common is the way they are able to engage the learner from start to finish.

Not surprisingly though, microlearning has its detractors:

"In this age of distracted living, where people crash their cars while text messaging and parents ignore their children while multitasking, do we really want a generation of students to take college classes on their laptops as they text, play games, and check their Facebook status updates?"

This is the view of Professor Robert Samuel who teaches writing at UC Santa Barbara. It's representative of a common resistance to the value of microlearning in particular and online learning in general.

What it misses though is that by giving them an opportunity to study with the best educators in the world via their mobile phones or laptops, the lives of millions of students around the world have been impacted by online learning.

In one of the most popular MOOC (Massive Open Online Course) classes in the world offered by world-wide online learning platform Coursera, Barbara Ann Oakley, American Professor of Engineering at Oakland University and McMaster University cites the essential role of microlearning.

Focusing on the relationship between neuroscience and social behaviour, she says that we need to give our brains time to alternate between two different modes of learning – the focused mode and the diffused mode - to achieve our learning goals.

“The focused mode is when the brain tries to concentrate on something (e.g when it tries to solve a certain math equation or to get in-depth on a certain topic). But the diffused mode is a more relaxing one, it’s the one to release your creativity and help you find an innovating solution to a certain problem or even learn a new concept that is completely new for you. “Research cited by the Journal of Applied Psychology confirms this: learning in bite-sized pieces makes the transfer of learning from the classroom to the desk 17% more efficient.

Although microlearning might still be regarded as the junk-food version of online learning, in a world where the ability to master new information quickly is a key competitive advantage, any opportunities to make learning more engaging, more immediate and more accessible should be celebrated rather than condemned.

Fortunately, there are many high-profile educators who are pioneering the way forward. Like Peter Norvig, an American computer scientist who is director of research at Google Inc.

When interrogating his own lecturing style before creating an online version of his teaching, he realised that educators are still using the same technology as the 14-century classroom and refers to the “textbook, the sage on the stage, and the sleeping guy in the back”.

Or like Coursera Co-founder Daphne Koller. In her TED talk What we’re learning from online education, she describes the kinds of students who could so easily have fallen through the cracks if not for online learning.

“Whether it’s Akash, who comes from a small town in India and would never have access in this case to a Stanford-quality course and would never be able to afford it. Or Jenny, who is a single mother of two and wants to hone her skills so that she can go back and complete her master’s degree. Or Ryan, who can’t go to school, because his immune deficient daughter can’t be risked to have germs come into the house, so he couldn’t leave the house...”

With so many spending more time at home during the Covid-19 pandemic, the need for the acquisition of skills has only intensified further. Today’s average employee wants to keep learning. In fact a recent Gallup poll found that 87% of millennials believe professional or career growth and development opportunities are important in choosing a job.

Technology provides a rich array of learning opportunities without the need for big investments of time or money. Microlearning is especially appealing because it’s self-directed and offers the option to learn at your convenience. We can fit lessons into our morning commute or on the couch instead of watching Netflix or scrolling mindlessly through social media.

Now we know that no one style of learning is suitable for all. For many of us who remember the experience of zoning out during long lectures, Mark Twain’s quote is still relevant “College is a place where a professor’s lecture notes go straight to the students lecture notes, without passing through the brains of either.”

The monolithic lecture might still be a valuable way of learning for a certain kind of student. But for the many students for whom focus and application remain a challenge, different styles of learning are invaluable when it comes to keeping them engaged and motivated. Microlearning with its bite-sized approach can be just the incentive they need.

Learning in bite-size chunks will always have limitations when it comes to mastery of complex subjects and depth of knowledge. If you’re serious about your subject, you will certainly have to study further than microlearning allows. But if as Plutarch said “The mind is not a vessel that needs filling, but wood that needs igniting” then it makes sense to celebrate any new options which encourage curiosity and lifelong learning. If you’re lucky, the desire to learn might be inspired by a great teacher. But today it might just as well be sparked by a shiny app on your mobile phone and a little green owl called Duo.