

INNOVATIVE LEARNING ENVIRONMENTS: “THE POWER PELLETS OF LEARNING”

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Abstract

To retain the attention of students is the most challenging job educators face world over. Distraction comes everywhere, in every form and at all times. The Gen Alpha students are more fast-paced and tech-savvy which makes it all the more difficult for the educators to meet the learners' fast-changing needs. The learners' concentration on a particular concept has reduced drastically. Recent research by the Microsoft has found that the students' span of attention has reduced to 8 seconds. With just 8 seconds in hand, educators cannot even spell out the topic, leave alone the concept. So, in this shockingly minimal attention span, what can the educators do? How well can the educators take the concept to the learners? In what way can the content reach the learners? The answer to these captivating questions is the recent innovative development in the field of education - NANO LEARNING – the power pellets of learning.

Keywords: *Nano learning, Gen Alpha, Innovative learning.*

INTRODUCTION

As a bolt from the blue, the pandemic struck the whole world and lock down was announced with immediate effect. The world came to a standstill and people were restricted indoors curbing all movement what so ever. Every form of trade, and every sector was held unaware of what to do next. Education was not exempted from this. Overseas educational institutions use synchronous and asynchronous mode of teaching-learning. So, neither the pandemic nor the lockdown did more harm to their educational sector. But in India, this situation made educators, learners, and stakeholders to be caught in the eye of the storm. Eventually, a new mode evolved significantly – the online mode. The learning culture changed since then. Off-line or face-to-face teaching-learning shifted to online, assignments given digitally and evaluation too done digitally.

The pandemic should be credited with the innovative developments in the field of education and it has boosted up few learning trends that will stay forever. These trends come with so many pros which helps in the teaching-learning process. Many software companies came out with new applications. There is also a downside to these new trends as the attention span of learners

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declined drastically. Learners stopped reading from textbooks, and writing in notebooks. Every information is available at the press of a button or on a single swipe. The learners are also prone to “online class-fatigue” or “screen fatigue” as well as the n-number of pop-up notifications because of which students have fragmented focus. Any overdose of information to the learners makes them feel so exhausted and also forget what they learn.

Twitter, Tik-Tok, snapchat, WeChat, short soundbites are a big hit among Gen Alpha. They keep switching between one tab to another within seconds because of either lack of interest or exhaustive content. Quick and capturing content in an entertaining way holds the attention of the Gen Alpha learners. It needs a split second to grab the attention of learners and keep them hooked to the content till the end. For example, tweets in twitter cannot be longer than 250 words, tik-toks cannot be longer than 60 seconds, reels or shorts not more than 60 seconds. These miniature versions of content hook the viewers till the end. The same miniature versions of content in teaching-learning contribute to an effective learning experience.

Gen Alpha learners seek short versions of content than the voluminous one. Content has to be presented in compressed forms and the learning outcomes in compressed time span. To satisfy the needs of learners and to meet the change in the current education scenario, an effective and a new trend called *Nano learning* is already in place. So, can the traditional education or formal education adapt to this recent development in education? The answer is A LOUD YES!!!

Meaning

“Nano” is an ancient Greek word which means “dwarf.” As far as English language is concerned, the word “nano” is a morpheme and it can be added to any other base word like meter, scale, technology etc. to arrive at the words nanometer, nanoscale, nanotechnology etc. According to Cambridge dictionary, the meaning of nano is given as ‘one billionth of the stated unit’ and also ‘extremely small.’ (Cambridge Dictionary) From the meaning of the term nano, let us arrive at the term nano learning. When ‘nano’ is added to ‘learning’, we get the word ‘nano learning’ which means learning in a minute or two or even less.

To understand better, nano learning is giving smaller amounts of inputs to learners within a short frame of time to retain information for increased productivity. When lessons are put in smaller amounts or in smaller chunks, it will keep the learners engaged, and the educators will also have the facility of putting a concept in a series of videos of few minutes – one objective in a single video. Nano learning is an effective and interesting add on to traditional learning solutions. This is in line with one of the maxims of teaching – parts to whole. From research conducted by the

Dresden University of Technology, it has been found that short contents help the learners to retain 20% more information than the regular form of content.

Content in Nano Learning

The content has to be to the point, limited in length, easier to produce and easier to learn, relevant and also adaptable. It should not have just information alone but should be infographic. The title needs to be very clear about the content it covers. Add on resources can be hyperlinked for practicing or training. In order to present an effective e-learning experience, learning outcomes must be designed in compressed time span. Hence, the content should communicate, stimulate, influence and lead the learner to successful learning outcome. This power pellet builds habits and develops skills at a single short burst than longer duration as traditional format of content.

As nano learning applies the principle of Pareto, where 80% of learning happens by applying 20% of effort, it is better to have the content more engaging so that the learners can learn with less effort. Learners can be roped in to co-create the module which they are in much need of. Nano learning – the power pellet of learning should be an open forum for connection and communication between educators and learners. The following need to be kept in mind while creating the power pellets material:

- Conciseness
- Vocal notes/Podcasts
- Shots/Video
- Using multimedia

Benefits of Nano Learning

The following are a few benefits of nano learning:

- Gives better learning results.
- No overdose of information.
- Less is more.
- Learning one concept at a time.
- Easier to understand
- Easier to remember
- Higher student participation.
- Effective knowledge transfer
- Reduces Cognitive overload

- Reinforced learning
- Reduces drain on human, and time resources
- Budget friendly
- Knocks out learning fatigue
- Facilitates spaced repetition

Nano learning Course Structure

While structing the course for nano learning, the educators should consider the following facts:

- Single objective
- Image to explain the concept
- GIFs to stimulate
- Case study on the concept
- Question to find out the understanding
- Answer key for reference
- Immediate feedback.
- Device compatibility

Nano Learning in a Nutshell

The following are the points put in a nutshell:

- It is a power pellet
- Ranges from 1-10 minutes
- Has a single objective
- Need-to-know content/relevance
- Precise and concise
- Self-contained with small snippets of information
- Accessed on the learners' interest or moment of the need
- Uses e-learning
- Uses multi media - efficiency
- Quick & easy access
- Infographics – engaging
- Low effort – high results

CONCLUSION

Educators must understand and respect the limited bandwidth of concentration of Gen Alpha learners. The content needs to be short and sweet for lightning-fast learning. Educators' role in a classroom is to make learning an inclusive learning and build more attractive learning culture. "Change is the only constant." Their role should shift from lecturers to curators who will build, bring into play, and evaluate the content. This power pellets of learning bolsters the relationship with the Gen Alpha learners. "*Meet the need and set them free*" should be the mantra of Nano learning. So, brevity is the soul of wit. *The power pellets of learning are here to stay.*

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