À La Carte Learning Catered on a Technology Platter !

"If we teach today's students as we taught yesterday's, we rob them of tomorrow"

- John Dewey

Health professions educational environment has experienced exponential transformation in the past few decades. The current healthcare environment is dramatically different from the one that sculpted our existing educational pathway. A surge in information and communication technology has brought about a monumental change in our healthcare system, which in turn is influencing changes in the landscape of higher education. Most of these changes are happening against the backdrop of growing concerns for accommodating the needs of the current and future generation of students in health professions.

The post millennials, also called the "generation Z" or the "i generation" constitute individuals born between 1995 and 2012. They are uniquely characterized as active problem solvers, independent learners, technology addicts, in addition to being advocates of fairness and equality. Although this generation represents the fledgling health professionals, it is imperative that we plan proactively for their learning.¹

We need to be prepared to work with these technophiles for whom internet and social media are intimately intertwined with their lifestyle. This cohort prefers cutting edge technology in education, patient care and learning experiences.

Being adept at finding information and handling technology with prowess, the generation Z prefers flexibility in learning. They are avid followers of heutagogical principles, where the learner decides what is to be learnt and how it needs to be learnt.³ In spite of being unrivalled in using technology, they lack the skills to manage information. Hence, there is a need to train this generation to critically and analytically assess the wealth of information available.

This generation prefers an À la carte approach that will enable them to customize their leaning so that they can pick and choose methods to succeed at that moment.² What Prof. Ronald Harden emphasized in one of his keynote speeches that we must shift from the tyranny of "Just in case learning" to "Just in time learning", is appropriate for this generation.

Generation Z spends so much time with their gadgets that they have less time in face-to-face interactions.¹ This may lead to their lack of competence in communicating effectively with patients, which is an essential skill for health professionals.

In order to cater to the needs of Generation Z, educators must be prepared for a major shift from traditional methods of teaching while coping with concurrent clinical and educational responsibilities.

An À la carte education menu for this generation will encompass the following:

• **Technology enhanced learning practices:** Learning activities involving podcasts, technology based simulations, interactive tutorials on internet, internet-based educational games, communication via social media sites such as Twitter and Facebook are to be interwoven into the learning scenarios.^{1,3}

• Flexibility in learning: Flexible learning gives students choices about when, where, and how they learn. They are free to choose the pace, place, and mode of learning. Blended learning, where a combination of online digital media with traditional classroom methods are used, work well with this generation. A flipped classroom model is a classic example for engaging this generation while allowing flexibility.⁴

• **Methods to enhance communication skills:** Educators need to balance between using technology and face-to-face innovative teaching strategies to enrich and enhance learning experiences. Programs should buttress learners' communication skills early in the undergraduate curriculum with the use of experiential and observational learning. Role playing, TED talks, direct observation at the workplace and self-reflection may prove useful remediation methods.¹

• **Delivery of essential skills:** As this generation prefers more hands-on experience with active learning strategies and onthe-job learning, undergraduate curriculum must focus on delivery of essential skills incorporating learning experiences that are both formal and informal as well as individual and group.⁵

• Best evidence health professions education: Training for this generation should be based on the latest findings from scientifically grounded educational research. Our aim should be to instigate evidence-based education initiatives that invigorate learner performance on cognitive and clinical measures.

Nevertheless, we need to mark time before complete reforms are implemented. Yes! It is important to evaluate teaching methods and learning strategies with changing generations, but before we totally drift to technology driven practices and à la carte education we must ensure that it is substantiated by guiding pedagogy and valid evidence base. There is a necessity to contemplate and evaluate whether technology is enhancing educational practices or distracting from content of instruction. It is not only important to invest in technology but perhaps more important to invest in faculty development to train them to use technology more effectively.¹ Ultimately, technology can only supplement but not supplant the living loving teacher, who will be the undeniable need for generations to come.

Prashanti Eachempati

Department of Prosthodontics Melaka Manipal Medical College, Melaka, Malaysia Adjunct professor, Manipal University Jaipur, Teacher empowerment centre, email: prashanti.eachempati@manipal.edu.my

REFERENCES

- 1. Eckleberry-Hunt J, Lick D, and Hunt R (2018) Is Medical Education Ready for Generation Z?. Journal of Graduate Medical Education. 2018;10(4):378-81.
- 2. Seemiller C, Grace M. Generation Z Goes to College. San Francisco, CA: Jossey-Bass; 2016.
- 3. Eachempati P, KS K, Komattil R, Ismail A, Heutagogy through Facebook for the Millennial learners, Med Ed Publish, 2017; 6[4]:25. doi:https://doi. org/10.15694/mep.2017.000194
- 4. Eachempati P, KS K, Ismail A, The flipped classroom in dental education Learning beyond the four walls of the classroom, Med Ed Publish, 2018;7[1]:42. doi:https://doi.org/10.15694/mep.2018.0000042.1
- 5. Steinert Y. Faculty development: From workshops to communities of practice. Med Teach. 2010; 32: 425-8.