## Cracking the 'Gen Z' Code

## Teaching Dentistry in Twenty-first Century

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## Disclosure

Authors do not have any financial relationships to disclose.

## Learning objectives

Identify	Identify modern tools to enhance the education of students	
Outline	Outline the various successes and failures in re-designing coursework	
Discuss	Discuss the use of several techniques to make the learning environment inclusive and equitable focused on the Generation Z learner.	
Identify	Identify modern tools to enhance the education of students in both didactic and clinical settings in the post-COVID era.	

What do you think is the biggest challenge in teaching Gen Z?

- Technology gap
- Generation/Values gap
- Attention span
- Perception and expectations





Have you noticed that students don't value the same values that you followed for years as an educator?

Yes, because they are Millennials

No, its just me getting older

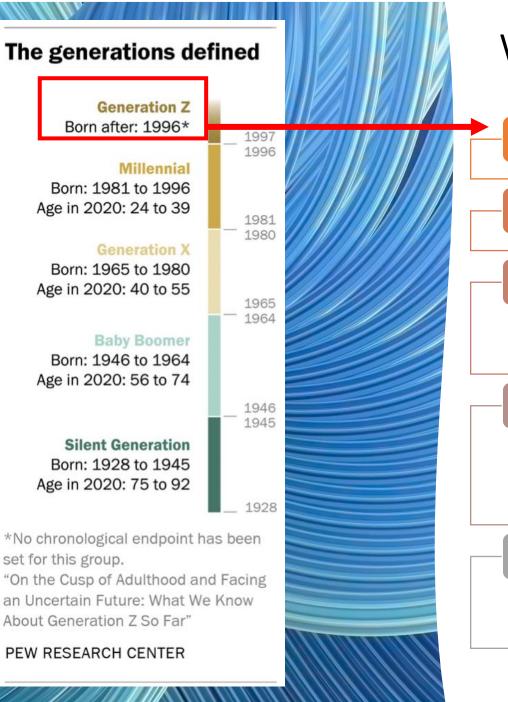
Yes, how do I manage that

No, its just a few of them

## GENERATION Z: Connected from Birth.

## Born mid-1990s to 2010.





## Who are we??

~25 percent of the U.S. population

#### ages up to 26 (1996-2010)

#### Socially conscious

- Grew up with iPhone<sup>®</sup> iPad<sup>®</sup> , Social media etc
- tech-savvy, digital natives

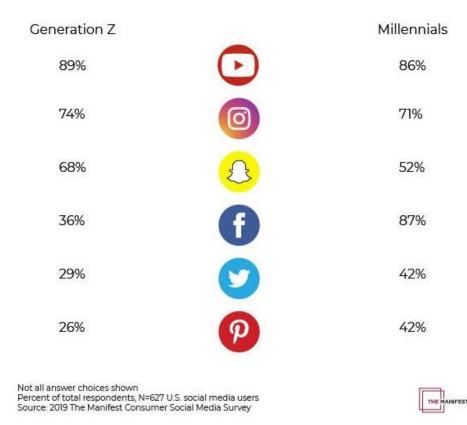
#### Differently focused

- Shorter attention span
- Like being coached than being taught
- Multi-taskers

#### Prefer learner specific teaching methods

- Frequent feedback
- Online videos-self paced

## Generation Z differs in media consumption even with Millennials



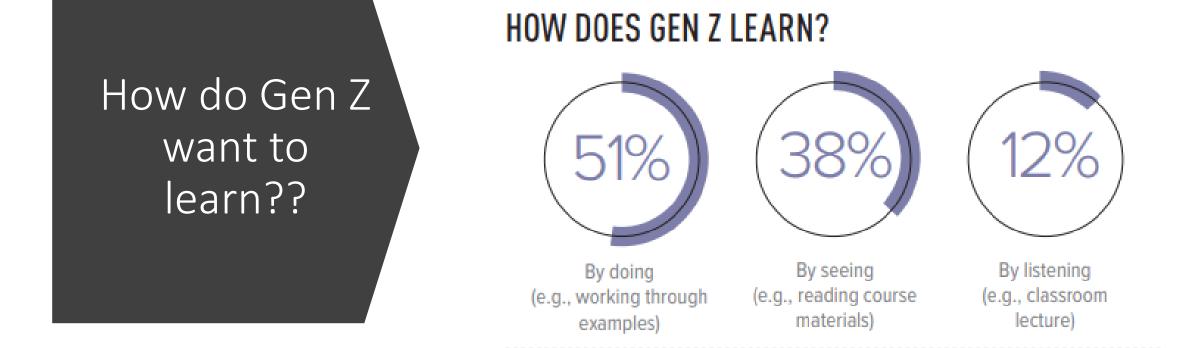
https://themanifest.com/social-media/how-different-generations-use-social-media

Millennials vs Gen Z

Generation type	Teaching methodology/aids
Baby boomers	Chalk and talk
Generation X	Chalk and talk, overhead projector, slide projector
Generation Y	Chalk and talk, PowerPoint presentation, videos
Generation Z	Chalk and talk, PowerPoint presentation, videos

## Learning styles

Kakodkar P. Gen Z Students: Newer Teaching Methods and its Application in Dentistry. J Dent Res Rev 2018;5:103-4.



https://www.bncollege.com/wp-content/uploads/2018/09/Gen-Z-Report.pdf

What would you do?

## How to customize dental education to Generation Z

Interactive session

How could you modify your course?





## Our Courses:

- Oral Radiology and Oral Surgery
- Traditionally very heavy in knowledge-based content
- Challenge to modify to fit the new learning styles

## Challenges Facing Oral Radiology education!

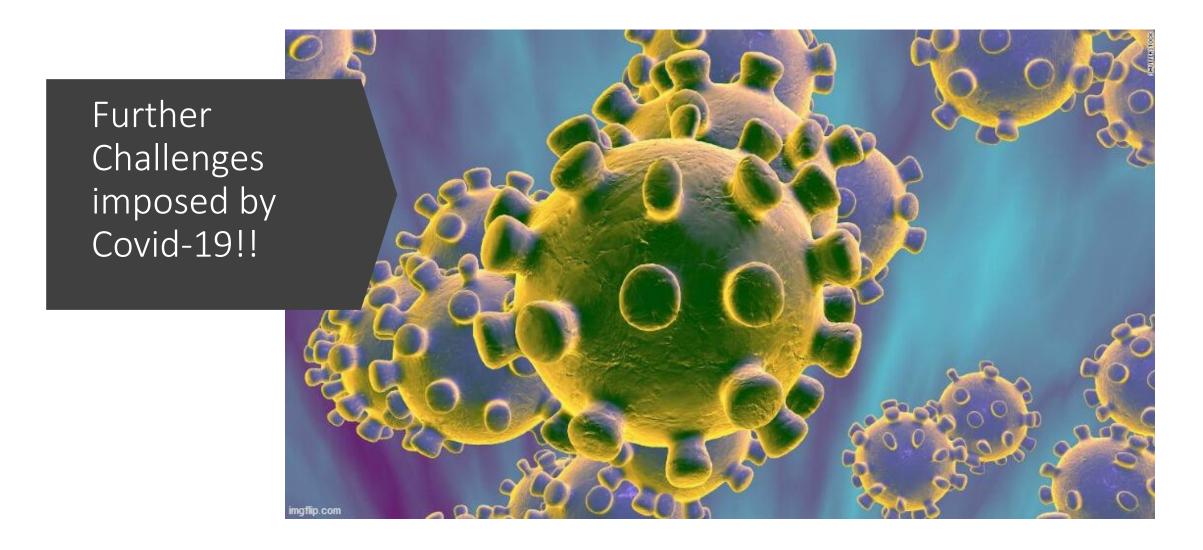
New technology-Learning curve

"Gen Z" entering dental school

More Inter-disciplinary education

## Covid 19 crisis!!!





Challenges in Oral Radiology teaching during Covid-19 pandemic- Pontual et al; Dentomaxillofac Radiol 2020 Jul; 49 (5)

#### Courtesy: Blog.zoom.us

#### Remote access class

 Microsoft teams, zoom, google classroom

#### Image interpretation

- Instagram, Linked-in, YouTube
  - Blended learning models
- Synchronous and Asynchronous

# Zoom fatigue is real!



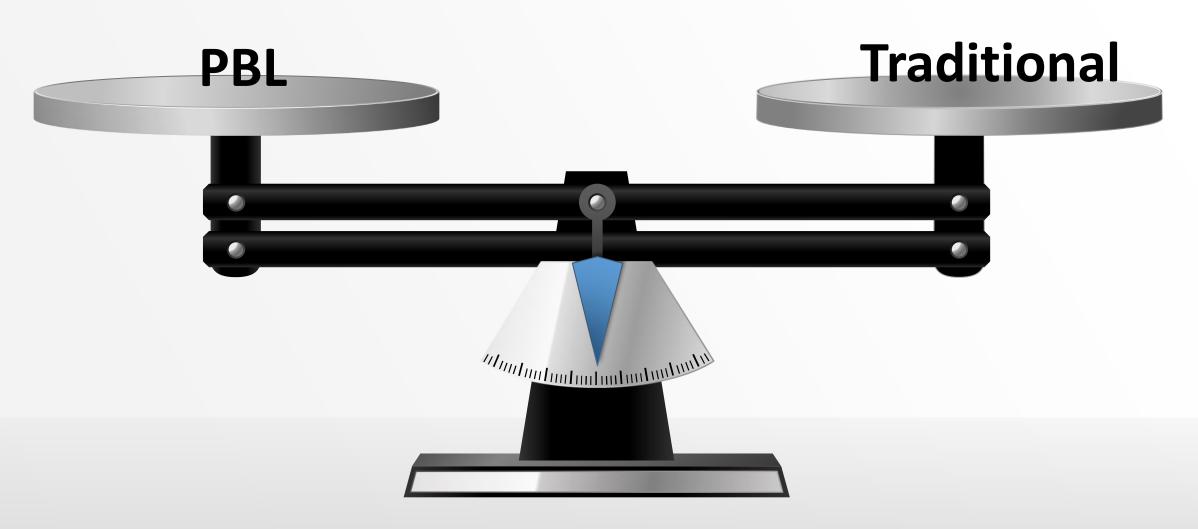
Documenting uncertainty: Online learning and emotional stress during a global pandemic, Hamil et al, J Dent Educ. 2020;1-2.

#### What is the Student Perspective?



Effectiveness of E-Learning in Oral Radiology Education: A Systematic Review; Glaucia et al.

Using Twitter for Teaching and Learning in an Oral and Maxillofacial Radiology Course, Gonzalez et al



## Solution: Balanced approach!!!



Use of Voice Thread in Radiology curriculum



## Oral and Maxillofacial Surgery

Changes: Spring 2019-2022



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## **Requirements for change**

Gen Z was approaching

Clinical/Procedure based course

Increased need for audio-visual teaching aids

More emphasis on practical applications

More emphasis on competency of a general dentist

**INBDE** changes

COVID 19!!!!!!

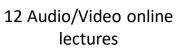
## Changes

Classroom	Core	Avoid	Retain
<ul> <li>Classroom sessions</li> <li>Less in number</li> <li>Case-based interactive sessions</li> </ul>	<ul> <li>Core lectures</li> <li>online lectures</li> <li>Addition of audio-visual teaching aids where possible</li> <li>Procedure videos</li> </ul>	Avoid redundant material from other clinical courses	Course credit hours will remain same • 1.5 Credit, 25 hrs

## Course outline changes

- 21 classroom lectures
- 4 tests
- 1 spring break
- 1 Review







9 classroom case- based interactive sessions



3 tests









3 Reviews

9 Online Pre-class tests

1 spring break



#### Touch Surgery: **Surgical Videos**

Surgical Training Simulator





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Anatomy for Maxillary Sinus Floor Augmentation

Simulation | 2 Phases



Anterolateral Thigh Flap

Video simulation | 3 Phases



AO Mandible Symphyseal and Subcondylar Fracture

8 Simulation | 2 Phases



AO Nasoorbitoethmoid (NOE) Fractures

Simulation | 8 Phases

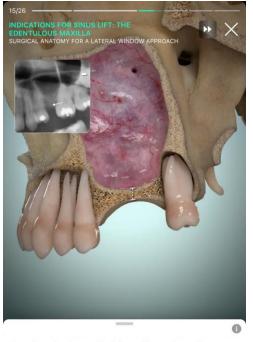


Condylectomy of the Temporomandibular Joint (TMJ) **Video simulation** | 1 Phase



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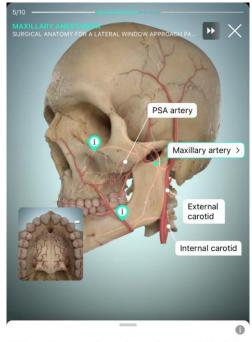
## App based education



An alveolar bone height of less than 7 mm (case-specific) is a sufficient indicator for considering sinus floor augmentation.

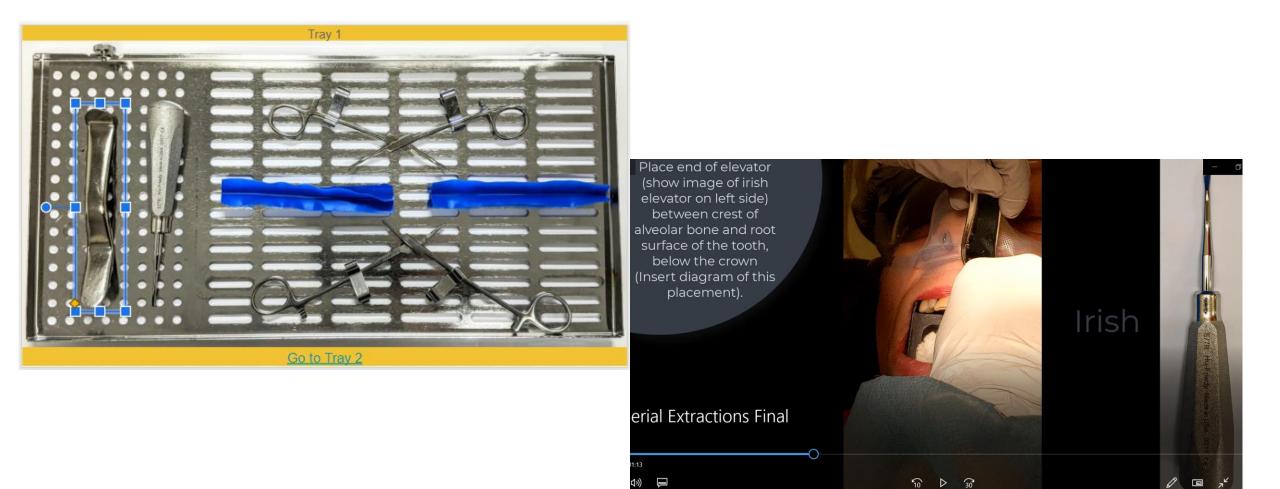


There are two approaches to gain access to the sinus by osteotomy. These are the lateral approach, and the inferior crestal approach.



The main arterial supply to the maxilla is the maxillary artery, itself a branch of the external carotid artery.

## App based education



## Audio-Video Supplements



## Simulation training





## References

https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

https://www.bncollege.com/wp-content/uploads/2018/09/Gen-Z-Report.pdf

Kakodkar P. Gen Z Students: Newer Teaching Methods and its Application in Dentistry. J Dent Res Rev 2018;5:103-4

Schenarts PJ. Now Arriving: Surgical Trainees From Generation Z.Journal of surgical education. 2020;77(2):246-253. doi:10.1016/j.jsurg.2019.09.004