



TECHNOLOGY IN
DENTAL EDUCATION

WHAT NEXT?



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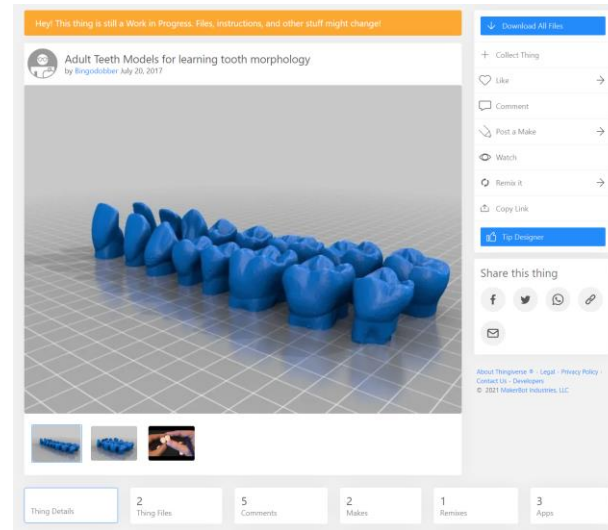
Associate Dental Dean for Regional Trainee Support
Midlands and East

WHAT NEXT FOR EDUCATORS?

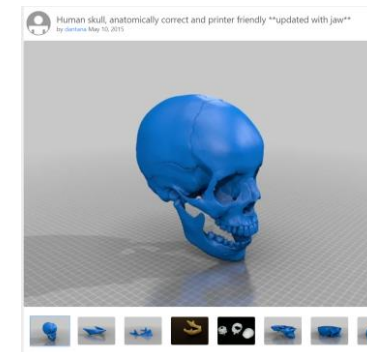
FLEUR KELLETT



CURRENT LEARNING MODALITIES



3DPRINTUK



VRiMS

Virtual Reality in Medicine and Surgery

Digital resource providing free access to VR content for all medical and surgical specialties:

- ORAL AND MAXILLOFACIAL
- ENT/HEAD NECK
- PLASTICS
- ANAESTHETICS
- ORTHOPAEDIC SURGERY
- BREAST SURGERY
- NURSING/ODP
- DENTISTRY
- SIMULATION TRAINING
- ACCIDENT AND EMERGENCY
- NEUROSURGERY

Mr Jagtar Dhanda

Consultant Maxillofacial/Head and Neck Reconstructive Surgeon

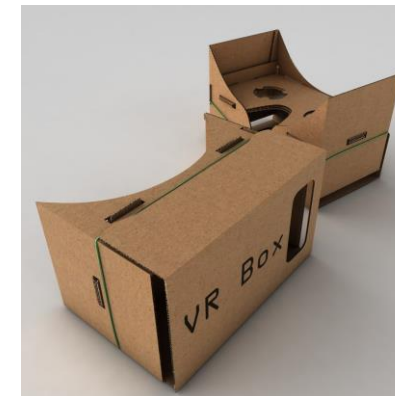


A NEW WAY OF TRAINING
FREE FOR TRAINEES
FOR ANYONE
ANYWHERE

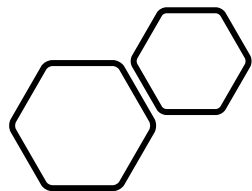
JANUARY 2021 COURSE OUTLINE REVEALED

RELEVANT CONTENT

- 5 Day annual conference - Jan 2020 and Jan 2021
- Cadaveric surgery – secure portal needs opening
- A new way of training
- Free for trainees
- Anywhere



Course Specialty	360VR content covered
Day 1: Head and neck reconstruction	VR Cadaveric Anterolateral thigh flap and mark up VR Cadaveric Medial sural artery free flap and mark up VR Cadaveric Fibula free flap dissection and mark up VR Virtual surgical planning for mandibular reconstruction with a fibula free flap
Day 2: Facial aesthetics, deformity and Facial palsy	VR orthognathic assessment VR orthognathic surgical techniques and demystifying presurgical orthodontics VR cadaveric rhinoplasty and patient assessment VR cadaveric blepharoplasty and patient assessment VR cadaveric rhytidectomy and patient assessment VR assessment of patient for facial palsy VR cadaveric gracilis flap VR cadaveric Abbe procedure VR cadaveric fascia lata sling procedure



Management of Medical Emergencies in Dental Practice with Virtual Reality in Medicine and Surgery (VRiMS)

Tue, May 11, 2021 6:30 PM - 8:00 PM BST

[Show in My Time Zone](#)

VRiMS has teamed up with Resuscitation Consultancy Medical Services Ltd to host a medical emergencies course for dentists using virtual reality technology (360VR) for an immersive training experience. This core CPD event covering the key principles of resuscitation and medical emergencies will be delivered with traditional webinars and 360VR content with live streaming from multiple camera angles. Participants will be able to choose their preferred camera angle stream by just turning their head, or they can view the 360 demonstration itself. All registrants will be debriefed on how to convert their mobile phone into a 360VR streaming device and advised on the headsets to purchase for the course (£10-20). The course will be delivered by Dave Edwards RGN, REMT, ALSi, APLSi, NLSi, Consultant Nurse

Educational Objectives

At the end of the course participants will understand:

- Current adult / child basic life support guidelines with the impact of Covid
- Use of bag valve mask
- Use of oral / nasopharyngeal airways
- Considerations when undertaking resuscitation in a dental chair
- Recovery position & the unconscious patient
- Management of airway obstruction & choking
- Use of pocket masks / BVM (with O2 therapy) oxygen therapy, including portable suction
- Team scenario practice
- Recognition of the seriously ill patient (A-E approach)
- Overview of drugs used in medical emergencies anaphylaxis, fainting / unconsciousness, fits, asthma, angina, heart attacks, diabetic emergencies
- Cardiac arrest in pregnancy
- Use of Automated External Defibrillator (AED)
- Risk assessment of emergency equipment & compliance with GDC and CQC recommendations
- Colour-coded flow charts to support treatment and a rapid action plan

Course requirements

Participants will be debriefed on mobile phone set up and headset set up via links to youtube videos in anticipation of the course

This course will attract 2.5 hours of verifiable CPD, participant engagement will be monitored.

Tuesday 11th
May
6:30pm to 8pm

FREE EVENT

Dave Edwards
Consultant
Nurse

<https://tinyurl.com/5rdczkhs>



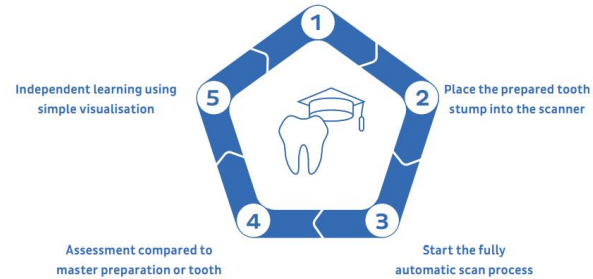
PREP SCANNERS



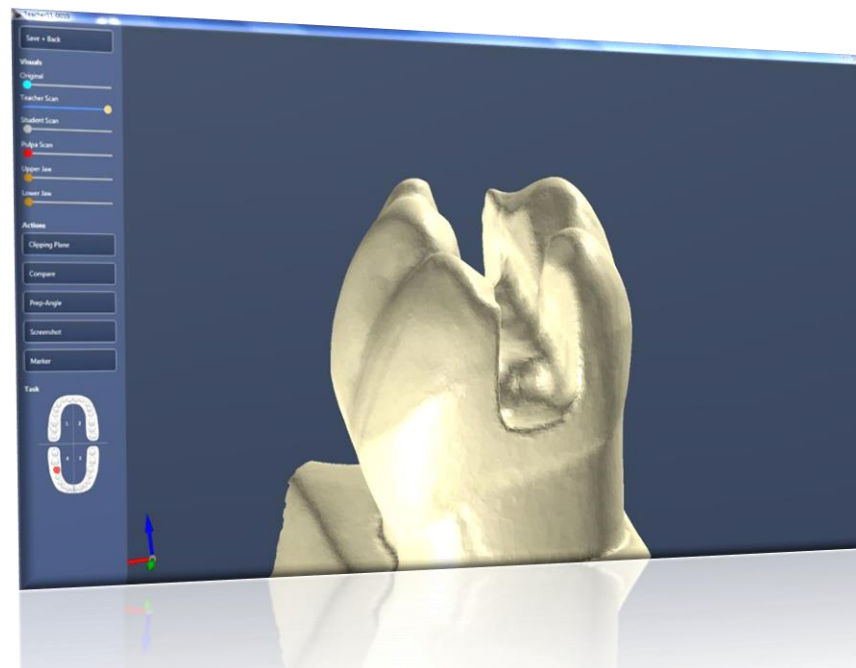
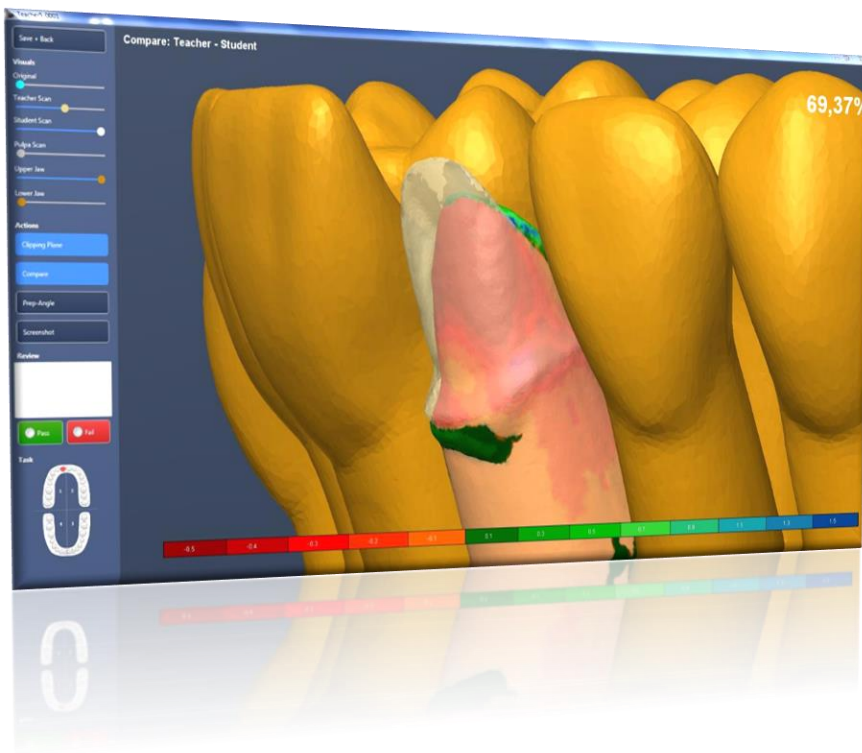
DENTAL TEACHER STAGES



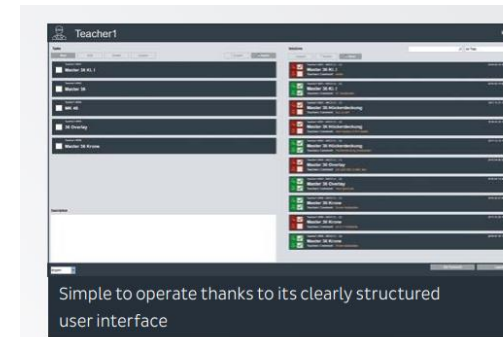
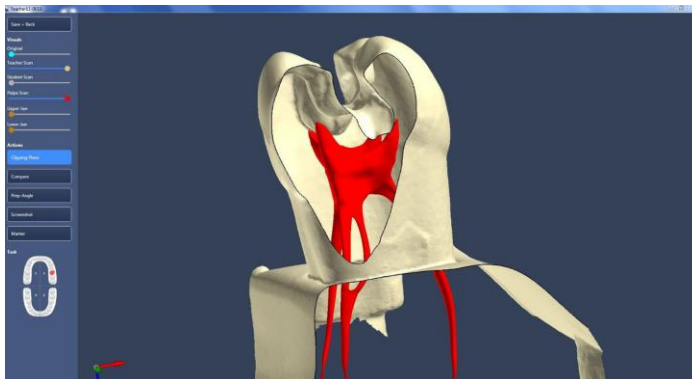
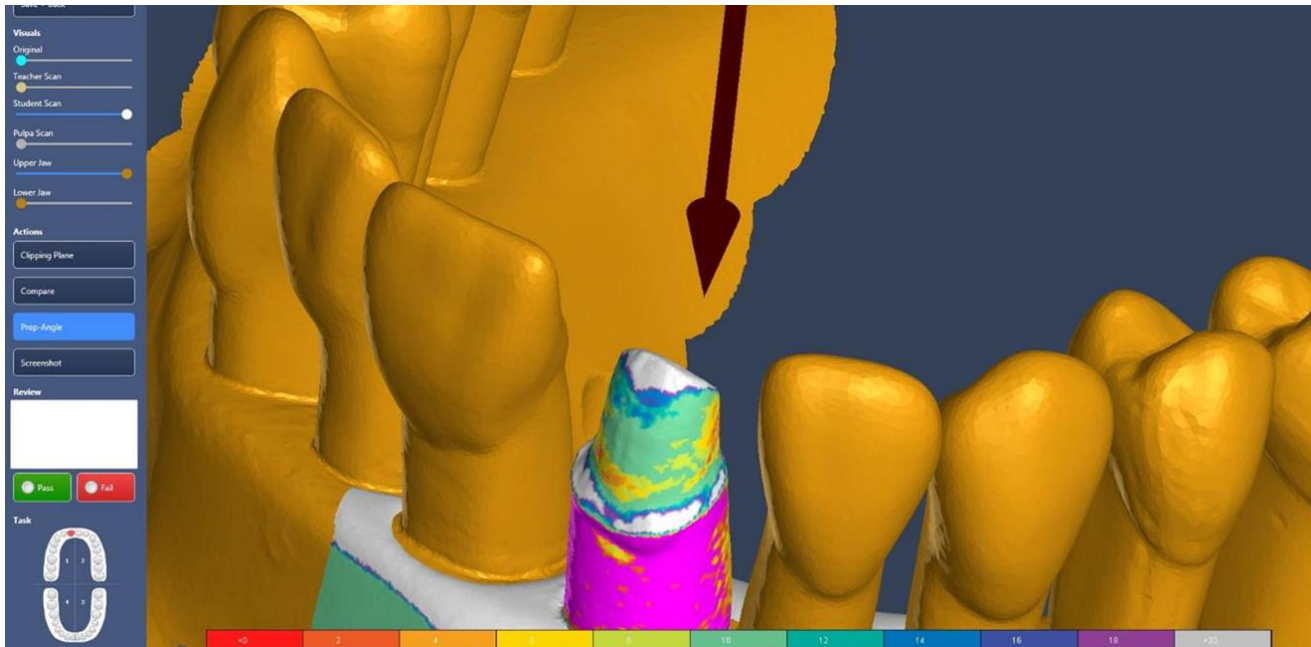
Carry out the preparation
in a phantom head



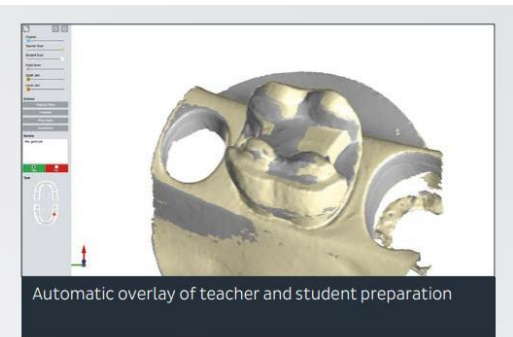
ANALYSIS



ANALYSIS



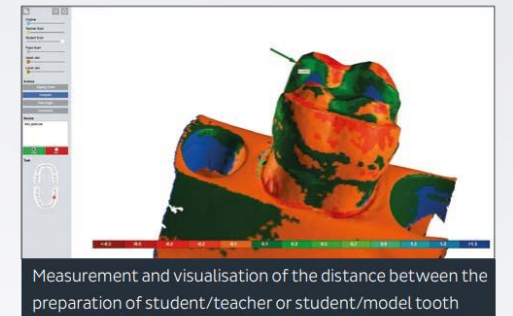
Simple to operate thanks to its clearly structured user interface



Automatic overlay of teacher and student preparation



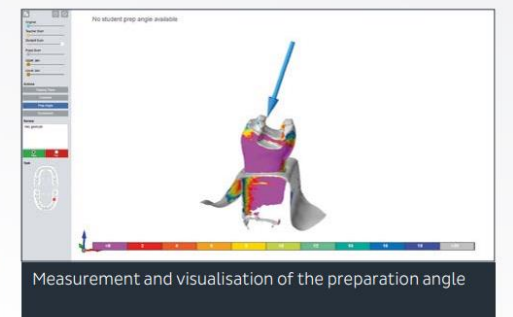
Visualisation of the model tooth



Measurement and visualisation of the distance between the preparation of student/teacher or student/model tooth



Displays from a choice of sectional planes



Measurement and visualisation of the preparation angle

Types of MASTER preparation Library based on KaVo Typodonts (24 Samples)

11 metal ceramic crown

11 ceramic veneer

11 full ceramic crown

11 monolithic zirconia

13 metal ceramic crown

13 full ceramic crown

14 –mod- class II

14 metal ceramic

15 full ceramic crown

15 –m- class II

16 –b- class V

16 –mod- class II



21 full ceramic crown

21 ceramic veneer

26 –mod- class II

35 monolithic zirconia

36 ceramic onlay

37 –mo- class II

37 full metal crown

43 full metal crown

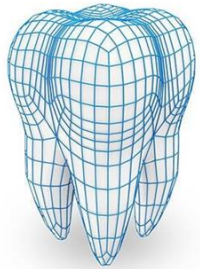
44 telescope crown

46 –mod- class II

47 metal ceramic crown

47 –o- class I

POSTGRADUATE APPLICATIONS



Self directed phantom head sessions

- KiTS
- SuppoRTP
- Refine, improve, maintain
- No need for speaker/expert

Remote engagement

- DFT
- DwD
- Improved feedback for remote teaching

