BARDES: Friday 7th October 2022
Short oral presentations

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Chair: Janice Ellis
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Chair: Alison Cairns
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Time	Abstract number	Abstract title
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Chair: Zoe Freeman
Room:

Time	Abstract number	Abstract title
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1403-1413	10	Dental hygiene and therapy students' perceptions of knowledge and clinical experience gained during a placement in the children's cleft clinic
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1.A comparative study investigating the use of intraoral scanners in the teaching of dental undergraduate students

Authors Alice Parr, Ishaq Mahmood, Satnam Virdee, Phillip Tomson (Birmingham University)
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Background: Intraoral scanners are equipped with software which provides detailed feedback on tooth preparations for indirect restorations. **Proposed question:** This study aims to investigate of use of an intraoral scanner improved student performance compared to traditional teaching methods. **Methods:** A cohort of 24 undergraduate dental students from the third academic year were selected to participate. The students were randomly placed into a control group who had access to tutor feedback only or another group receiving feedback from the scanner. Both groups carried out the same tooth preparation and then had their work evaluated accordingly. Following the feedback received, students then performed the same procedure, and their work was scanned by the scanner. The preparations were judged against a master/ideal preparation. Participants were also asked to complete a questionnaire to gauge their feedback on the use of a scanner. **Results:** The questionnaires highlighted overall positive feedback on use of the scanner with high ratings for interactivity and improvement in knowledge
Areas where additional support and feedback would be welcome: The comparison of use of the scanner on student performance.

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2. Why aren't we doing better? Are dentists and dental students prepared to support patients experiencing intimate partner violence?

Authors Sarah Farmer, Janice Ellis (Newcastle University)
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Background Intimate partner violence (IPV) is psychological harm with physical or sexual violence including controlling behaviour, acts of aggression, sexual coercion, and psychological abuse. It's estimated that 30% of women in the UK will experience IPV at some point in their lives. The majority of IPV trauma results in head and neck injuries. This makes dentists ideally placed to identify patients experiencing IPV; however previous research shows a lack of knowledge and a perceived inability to help these patients at undergraduate and postgraduate level. The lockdowns have highlighted the valuable role that women's services play in disrupting the cycle of abuse. Early identification and signposting are key to improving this public health crisis with its associated health and social consequences. It's therefore important to identify exactly when, in a dentist's career, this lack of knowledge becomes a barrier to be able to target effective intervention. **Proposed primary research question** Do dentists and dental undergraduates feel that they are well prepared to communicate with and treat patients who have experienced IPV, and does this change with experience in primary care? **Methods** This cross-sectional study will use focus groups to explore how prepared dental students perceive themselves to be, how competent they feel communicating with patients who have experienced IPV, and how confident they would feel about applying this to real life situations. The study will then look at how this compares to primary care dentists. The study will explore the factors that facilitate or hinder appropriate management
Areas where additional support and feedback would be welcome
Any feedback on the research idea would be appreciated.

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3. Development and evaluation of remote training interventions

Authors Clement Seeballuck, Andrew F Hall, Simon Shepherd, R Graham Chadwick, Peter Mossey (Dundee University)
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Background Although blended curricula have many advantages over traditional methods, distance learning approaches are not as readily applicable to courses with clinical and practical elements. In Dental training patient care, diagnosing, patient interaction and development of manual skills are of paramount importance. The global pandemic however dramatically increased the need for adapting to the world of remote interactions. The rapid spread and impact of COVID 19 prompted a rethink in how we work, how we live and how we learn. This PhD project details the development of 2 remote interventions: 1) 3D printed tools addressing pre-clinical training. 2) Live streaming of clinics to enhance clinical training. The project also aims to develop a tool kit for evaluation of training interventions **Proposed primary research question** Evolving in response to changing educational environment post pandemic. 1) Do these remote interventions enhance clinical training? 1) (A) Does remote simulated practice enhance training for Undergraduate Dental Trainees? 1) (B) Does remote clinical exposure enhance training for Undergraduate Dental Trainees **Methods** 2 streams of evaluation: 1) Evaluation of a specific, measurable "skill" 2) Evaluation of the trainee experience through self-efficacy **Early findings/ Results** Interventions developed. Currently designing the evaluation
Areas where additional support and feedback would be welcome Identifying evaluation outcomes and processes to accurately capture relevant data

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4. Assessing Clinical Reasoning: introducing the Structured Clinical Reasoning (SCR) Examination

Authors   John Linden, Alison Cairns (NHS Lothian ,Glasgow University)
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Background, Clinical Reasoning is a process where clinicians observe, collect, and interpret data to diagnose and treat. It is a fundamental clinical competence of dental students' preparedness to practice. Within our institution, this was previously assessed with Case Presentations and Objective Structured Clinical Exams (OSCE), both assessments have limitations. OSCEs have had a positive impact in dental education, however, its ability to assess clinical competence is reported to poorly correlate with students' higher cognitive reflection skills (Trico et al., 2015). The SCR was introduced as an additional exam designed to test within Bloom's taxonomy at the evaluated and analyse levels (Escudier et al., 2018) **Proposed primary research question** To investigate the feasibility and utility of the SCR examination in the undergraduate dental curriculum. **Methods or proposed methods** Multiple matched SCR scenarios were created and quality assured. Students were ranked by ability. Two calibrated and independent examiners for each scenario used global/professional judgement marking, a proposed answer schedule was available for guidance. Inter-examiner reliability, scenario difficulty and examiner perceptions were assessed. **Early findings/ Results** There was little difference in median/mean score across the sessions for the overall score. Two of the scenarios had high inter-marker agreement (kappa 0.71 and 0.89) with the other lower (kappa 0.54). Pre- and post-examination questionnaires suggested examiners were confident in grading by professional judgement, preferred exams without itemised marking and were confident with the viva-style. There were no statistical differences pre- or post-exam. Areas where additional support and feedback would be welcome

Areas where additional support and feedback would be welcome assessing student perception of the exam and on maximising inter-examiner agreement.

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5. An Evaluation to Explore and Understand Blended Peer-Group Learning: Student Views and Practice

Authors Sam Andreasson, Catherine Haines (King's College London)
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Background Blended Peer-Group Learning (BPGL) can be beneficial to the academic and clinical learning environment and student experience. BPGL sessions were incorporated into a two-year dentistry master's programme at King's College London, enabling the two year-groups to hold joint monthly case-based discussion meetings. Assessing students' views and experience of BPGL offers important information for programme quality assurance and development. **Proposed primary research question** To explore and describe student perception and experience of BPGL and discover how it may influence student learning experience **Methods or proposed methods** All students enrolled on the programme over a 3-year period were invited to participate. Intrinsic case-study methodology was used to explore and describe students' experiential and contextual views of BPGL. Strategies to enhance trustworthiness included triangulation of data from 7 semi-structured interviews, 4 questionnaires and thirteen feedback forms. Purposive sampling provided appropriate rich, detailed, qualitative data which reached saturation and was thematically analysed in depth. **Early findings/ Results** 7 students participated in the study. 75% agreed that the BPGL sessions helped: clarify what level to pitch their revision, improve knowledge and confidence in managing patients, provide useful revision material; 100% agreed and strongly agreed they improved professional interaction with fellow students. Three main themes were constructed: benefits, barriers, and facilitators to BPGL implementation. The results showed the students valued the sessions. Perceived benefits included enhanced motivation, learning quality, leadership skills development and development of a community of learners providing professional, educational, social and emotional support. Barriers and facilitators influencing efficient and effective functioning of BPGL were also identified. This study suggests how BPGL can be used in higher education to improve the quality of student learning and experience by incorporating it into pedagogical frameworks as illustrated in this study.

Areas where additional support and feedback would be welcome

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6. What makes dentists want to provide, and continue to provide, NHS dentistry?

Authors Jennie Ross, Zoe Marshman (Richmond Dental Care, University of Sheffield)
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Background It has been well publicised that the public are struggling to access NHS dental care, with practices struggling to recruit and retain practitioners wanting to work in the NHS. Working pattern surveys of NHS dentists show that morale is declining, with two thirds thinking about leaving the profession (NHS Digital 2020). Those who provide majority NHS care tend to work longer hours and take less annual leave than those providing private care. Reported stressors in general practice include financial pressures, fear of litigation, professional isolation, and ethical dilemmas (Gallagher, Colonio-Salazar and White 2021). Despite that

in 2021-22 there were 24,272 different providers of NHS dentistry in England (NHS Digital 2022), therefore there are still many practitioners providing NHS care. What is it that makes them continue? And what can be done to support them? NHS data highlights those who report wanting to leave the profession but does not examine what keeps them working within the NHS. This study aims to explore what it is that makes practitioners want to continue to provide NHS dental care. These factors will then be used to explore and develop educational interventions or support methods that could be employed throughout the career of a primary care dentist. **Proposed primary research question** What are the factors that lead to practitioners wanting to provide NHS dentistry? **Methods** As this research is aiming to understand perceptions then a qualitative approach will be used in the initial stages. Focus groups or semi-structured interviews will be undertaken with NHS dentists at different stages in their careers to explore their motivations for providing NHS care. Prior to this patient and public involvement and engagement (PPIE) will be undertaken to see whether this is a topic of interest to the public, and what they would like to be explored. Those participants in the PPIE will then be invited to continue to input into the project for participation in aspects including reviewing the plain English summaries for grant applications and future write ups and dissemination of the findings.

Areas where additional support and feedback would be welcome

Prior to interviewing dentists PPIE will be undertaken to involve the public and patients in what they see as important in NHS dentists and what they want from NHS dentists. There will then be continuing involvement from PPIE representatives when developing the research proposal for an in-practice fellowship application. Further involvement when conducting this project will be sought from PPIE representatives in the interpretation of data, reporting and ideas for future projects.

I would welcome some support in how to effectively recruit the public, including those who currently do not access NHS care, and how to achieve a wide representation of patient groups. I would also like to discuss innovative ways of conducting PPIE, away from just a meeting either online or around a table.

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7. The postgraduate learning environment at the University of Bristol

Authors Jennifer Haworth, Peter Fowler, Patricia Neville, Julie Williams, Jonathon Schofield, David Dymock (Bristol Dental School)
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Background There have been significant changes to learning environments in recent years, with a shift to hybrid teaching of academic material, reduced clinical teaching and limits on aerosol-generating clinical procedures. Bristol Dental School has a tradition of educational research focused on undergraduates, but little work is focused on postgraduates. There are currently 65 postgraduates enrolled in four speciality training programmes at the School. There has been an increased number of extenuating circumstances submissions and student suspension requests. These are probably reflective of additional stress in recent years experienced by postgraduates. In response to this knowledge and research gap about the postgraduate community at Bristol Dental School, an exploratory mixed methods study is planned, examining postgraduate students' perceptions of and attitudes towards the learning environment. This research will provide educators with strategies to support student engagement and is particularly timely as planned changes to provision of dental educational environments afford a good opportunity to consider how best to monitor and support student wellbeing. **Proposed primary research question** What are dental postgraduate students' perceptions of their learning environment at Bristol Dental School? **Methods** Mixed methods study. 1) Quantitative data collection using modified Dundee Ready Education Environment Measure (DREEM). This validated closed questionnaire captures data on five domains of the educational environment 2) Qualitative data collection via one-to-one interviews using a convenience sample. The "critical incident technique" will be used to investigate effective and ineffective clinical, academic and research learning environment characteristics.

Areas where additional support and feedback would be welcome - Application and piloting the DREEM questionnaire for our particular student cohort - Methods to incentivise postgraduate student participation.

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8. Bringing together Black students from two different dental schools to explore their perceptions of facilitators and barriers to careers in Dentistry.

Authors Favour Onwudiwe, Obioma Ukoha, Sally Hanks, Amitha Ranauta, Nikolaos Donos, Catherine Coelho, Vivien Onamusi, Alasdair Robertson, Julie Monk, Tanaka Kadiyo, Modupe Toluwanimi Osunkoya, Amy Amanfu, Antonia Oluwatosin, Oluwakemi Ajayi, Nadezhda Anim-Somuah, Kaamilah Shitta-bey, Nicole Elango, Rachel Ogunleye, Oluwasola Asaolu (University of Plymouth, Queen Mary University of London)
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Background Black people are under-represented in dentistry compared to their percentage in the UK population, and there are even fewer Black people in the field of academia and research. Using qualitative data collected from Black dental students from the University of Plymouth and Queen Mary University of London, this study seeks to explore barriers and facilitators they identified as being encountered on their journey into the dental profession. Additionally, this study aims to explore future

mitigating activities which could support diversification of Dental Academia and broaden career options for Black people in dentistry. **Research question** What are the facilitators and barriers to young black dental students trying to enter the field of academia and research? **Methods** Both universities were granted ethical approval and promoted this initiative to their respective dental students from black backgrounds. All students who volunteered and provided written consent were chosen to participate. A two-hour focus group facilitated by one of the students (trained for the task) was undertaken with 9 students (4 from Queen Mary, 5 from Plymouth). The data was transcribed verbatim, and thematic analysis is currently being conducted. **Findings** The preliminary findings on the barriers faced by the participants include little to no mentorship; poor understanding of the dental academia pathway; and perception of insufficient remuneration. Findings will inform future practise across the student life cycle, to support advancement to academic and research careers for Black students.

Areas where additional support and feedback would be welcome

Feedback on which key themes resonate, how trustworthiness can be increased, and ideas for future research or collaboration is welcomed.

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9. Decolonising the Dental Curriculum

Authors Nilufar Ahmed (Bristol Dental School)
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Background, Decolonisation and Inclusion are key challenges across academia including Dental Schools, but the concept remains poorly understood. Dentistry has been slower at taking up this work compared to other health disciplines and there is little guidance on what it means or how to begin to undertake this work. This presentation will share learning from research at Bristol Dental School on a project entitled 'Decolonising the Dental curriculum'(DDC) working with students as co-researchers. It will introduce decolonisation and why it is imperative to the study and practice of dentistry. It will share study design and early findings and planned next steps. The presentation will be helpful for researchers and educators keen to begin this work in their own Schools and pose key considerations that can frame planning. Early findings highlight inclusive practices, but also issues which perpetuate inequalities and hinder inclusion and limit diversity. This has implications not only for student and staff recruitment and retention and wellbeing, but also for the quality of patient care that can be delivered in today's diverse and multicultural societies. **Proposed primary research question** What does decolonising the dental curriculum mean and is decolonisation relevant to dental education and practice? **Methods** Coproduction of research with ten student researchers from across 5 years of the BDS programme. Mixed methods data collection using separate student and staff surveys to collect quantitative data and focus groups and interviews to collect qualitative data. **Results** Great engagement with 112 people taking part across the study. Confusion and lack of clarity about what decolonising actually means among students and staff. Many descriptions of decolonising are simply describing diversifying images and content e.g., adding in images of non-white people/gums. This simplification of decolonising risks further entrenching inequalities. Students discussed experiences of racism from peers and staff and the lack of any perceived avenues for reporting this – this challenges workshops encouraging students to 'whistleblow' on discriminatory and other problematic behaviours.

Areas where additional support and feedback would be welcome It would be great to hear about any similar work being undertaken at other dental schools and potentially collaborate to share the methodology and questionnaire devised in the study with other schools so we can create a cross sectional data set.

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10. Dental hygiene and therapy students' perceptions of knowledge and clinical experience gained during a placement in the children's cleft clinic

Authors Faith Campbell, Alison M Cairns (Glasgow Dental Hospital and School)
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Background In November 2021, Dental Hygiene and Therapy (DHT) students from Glasgow Caledonian University (GCU) began placements at the children's cleft clinics at the Royal Hospital for Children (RHC). Students review and treat children with a cleft under the supervision of a tutor in DHT. Previously DHT students did not have exposure to children with cleft and may have graduated without seeing a cleft child. However, in the general dental service (GDS) these students would be expected to provide routine care for children with cleft and may feel underprepared to do so. DHT students' cleft clinic experience should provide them with confidence and experience to appropriately care for these children within the GDS. Subsequently developing a workforce that can provide effective care to reduce oral health related inequalities which does not discriminate against children with cleft. **Proposed primary research question** Has the experience of treating children with a cleft: 1. Equipped DHT students with the knowledge and confidence to care for them? 2. Been a valuable learning experience for DHT students at GCU? **Methods or proposed methods** Initial feedback regarding the learning experience was collected through an anonymous online questionnaire. Subsequently semi structured focus groups are being conducted with DHT students that have attended the cleft clinic. **Early**

findings/ Results 91% of students felt that the placement was a beneficial learning experience. 100% now feel confident in providing prevention for children with cleft. 27% recalled cleft teaching prior to the placement. 100% felt that teaching was or would have been helpful. Survey responses are being explored further in focus groups.
Areas where additional support and feedback would be welcome

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11. How is a dentist defined? Exploring the development of the learning outcomes for dentists in the UK

Authors Helen Mather, Chris Vernazza, Charlotte Rothwell, Giles McCracken, Janice Ellis (Newcastle University)
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Background Concerns around the preparedness for practice of dental graduates are certainly not new but have increased over a period of considerable changes in the learning outcomes for dentists required by the General Dental Council (GDC). In view of the lack of available evidence for how learning outcomes in Preparing for Practice (PFP) were developed, it was important to explore how a dentist is currently defined by the GDC. **Proposed primary research question** The aim of this research was to understand the context and impetus for the development and introduction of revised learning outcomes in PFP, in order to appreciate how and why the attributes of a dentist are currently defined. **Methods or proposed methods** Semi-structured interviews were conducted with key stakeholders in the development of PFP and TFFY. These were complemented by a search of the GDC document archive. Thematic analysis using a framework approach was undertaken. Curriculum mapping was used to cross reference and compare learning outcomes in PFP to those in TFFY **Early findings** Initial analysis of interview and document data identified three overarching themes:

- Understanding the role of the GDC
- Contextual changes in dentistry
- Outcome of undergraduate education and training

The curriculum mapping identified key changes in the proportions of outcomes describing clinical and professional skills, and in the content of the learning outcomes. The GDC is responsible for defining the learning outcomes required of a dental graduate and are likely to have been influenced by contemporaneous events and other stakeholders. The changes identified between TFFY and PFP are likely to have impacted on how providers modified curricula to meet these requirements. There is a need to define the purpose of undergraduate education and training, and the attributes of a dental graduate. This has informed the next phase "What are the attributes required of the newly qualified dentist" in which the aim is to develop stakeholder consensus on the required attributes of the newly qualified dentist.
Areas where additional support and feedback would be welcome Considering the timeline of the GDC revision of learning outcomes, how might this work now have impact

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12. Clinical skills training through enhancement of the traditional flipped classroom approach - bringing phantom head exercises to life

Author Stephen Deboo (University of Liverpool School of Dentistry)
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Background The flipped classroom approach has gained much attention in recent years in dental education as a means of incorporating a hybrid learning strategy into the undergraduate curriculum. There is currently some debate as to how best bridge the clinical transition gap. There is limited evidence as to whether contextualisation of traditional clinical skills training could help prepare students more effectively for patient centred clinics. Could contextualisation of clinical skills training exercises help bridge the clinical transition gap by preparing students effectively for patient centred clinics? **Methods or proposed methods** The purpose of this approach involved taking given restorative exercises due to be performed in a clinical skills environment and incorporating them into simulated patient scenarios. Prior to a given session, 2nd year BDS/BSc students were given access to the learning resource which was presented using MS Sway. Each Sway consisted of patient history, radiographs, special investigations, and risk assessment for contextualisation. Instructions for clinical skills exercises including procedural demonstration videos were embedded and MS Forms quizzes related to the scenario for students to complete before the session. 7 patient scenarios were developed for the component. Students were later asked to complete a component evaluation related to the use of the contextualised patient scenarios which enabled both quantitative and qualitative evaluation. **Early findings/ Results** 94% of students (N=62) agreed or strongly agreed that the contextualised scenarios supported their learning. Students commented that they appreciated the flipped classroom design and liked the format of working through cases related to the exercises they were to perform during clinical skills sessions.
Areas where additional support and feedback would be welcome

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13. Is a Clinical Lecturers perception of being beaten with the 'Student Feedback Stick' valid?

Author Phillip Brown, Luke Dawson, Mark Jellicoe (University of Liverpool School of Dentistry)
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Background Data suggest that engaging students and staff as partners develops trust between learners and their teacher, a situation that supports learning. We have been exploring approaches to establish this beneficial partnership. One of which has been to capitalise on staff/student feedback mechanisms. After each clinical episode dental students receive developmental coaching style feedback from their tutors. The purpose of this feedback being to support reflection and goal setting, to enable each learner to translate their feedback into a substantive behavioural change, on their journey to becoming an independent practitioner. Self-reflective practice is an important skill that all learners must develop and as such it has been identified as one of the core aims of the Centennial Curriculum at Liverpool Dental School: "produce dental professionals who are able to utilise feedback, reflect on their performance, and identify and address their learning needs throughout their practising lifetime". However, it is recognised that teachers often utilise different teaching styles and have varying effectiveness and acceptance when providing feedback to learners, which can affect student acceptance and trust. Therefore, to try and help avoid this potential source of dissonance, staff are given insight into how their feedback and teaching styles are perceived through the use of a learner to staff feedback tool called 'Student Recorded Experience Measure' (SREM). This study is designed to find any correlation between SREMs feedback and its impact on teaching and student learning. Currently there is limited confidence by staff that Student Recorded Experience Measures (SREMs) provide meaningful feedback that should be used by staff to inform their teaching and feedback practice. In the extreme, some staff feel that the SREMS feedback given by learners to improve teaching practice simply reflects retaliation when providing the learner with feedback highlighting developmental needs or below levels of expected independence **Primary Research Question** Does encouraging learners to participate as partners by providing feedback to their teachers support their own learning and development? **Methods** Mixed methods will be employed, and two surveys will be disseminated, using Jisc Online Survey. Learner Questionnaires will be used to develop understanding of the learner perspective of what motivates them to provide feedback following a clinical episode. Corresponding Teacher Questionnaires will be distributed to understand their perceptions and engagement with SREMS. Quantitative data will be analysed descriptively, and inferentially, with qualitative data being investigated using Thematic Analysis.

Areas where additional support and feedback would be welcome
- Should all student feedback be anonymous?
- Can we really expect students to know the best examples of pedagogic teaching?
- Do we strive too much for standardisation of teaching?

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14. Intraprofessional education and collaborative practice experiences in dental education: a mixed method inquiry

Authors Alaa Daud, Igor Blum, Nadine Khawaja, Anthony Roberts, Ms Yvonne Nyblom, Ms Clare McIllwaine, Chris Louca, Albert Leung, Barry Quinn (Qatar University, King's College London, Cork University, European Dental Hygienists Federation, University of Portsmouth, University College London, University of Liverpool School of Dentistry)
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Background, why is this subject area of interest? In 2010, the World Health Organization recognised the importance of and affirmed its commitment to interprofessional education. In the dental context, Intra-Professional Education (IntraPE) refers to dentistry and dental hygiene/therapy students learning together during all or part of their professional training. IntraPE provides a basis for effective team-based oral healthcare in the dental practice environment, utilising the skill mix of the entire oral healthcare team. Thus, establishing IntraPE experiences supports collaborative practice (CP) skills and high-quality shared patient care Proposed primary research question What are the perceptions, benefits, and barriers to the implementation of effective IntraPE in the dental learning environment? Methods or proposed methods Quantitative and qualitative data on IntraPE and CP teaching and experiences were collated through a questionnaire delivered to attendees of the Association for Dental Education in Europe (ADEE) annual conferences in 2021 and 2022. Themed focus groups were conducted. Data was analysed descriptively and narratively, and the results triangulated. **Early findings/ Results** 42 responses were received from 18 countries within Europe and beyond. There was consensus on the benefits of IntraPE and CP which, to date, have only become established in a limited number of countries, predominantly at preclinical level. Variations were observed regarding the teaching and practice of IntraPE and CP, particularly in simulation and clinical teaching. Barriers included logistics of combining programmes, teaching at different sites, timetabling challenges, funding issues, and staff adaptability. Dental institutions should embrace collective responsibility towards

integrating meaningful IntraPE and CP into their curricula, as current models do not adequately prepare graduates for effective collaborative dental patient-centred care.

Areas where additional support and feedback would be welcome

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15. Interprofessional approach to teaching digital dentistry

Authors Jonathan Marsden, Stephen Deboo, Michael Aspden (University of Liverpool)
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Background, why is this subject area of interest? Digital dentistry has developed greatly over the past decade, playing an increasing role in clinical practice. This has been accompanied by a growing expectation for modern graduates to be proficient in digital fluency. Interprofessional education plays a crucial role in helping to prepare students to enter the modern healthcare workforce and foster collaborative practice. In this piece of scholarship, we hope to show a novel approach to collaborative teaching amongst undergraduate dental therapy and dental students. **Proposed primary research question** Does a collaborative teaching approach enhance the understanding of dental undergraduates' scope of practice with regards to digital dentistry? **Methods or proposed methods** BDS and BSc students attend a series of simulation sessions of increasing complexity as they progress through the undergraduate curriculum. Initial clinical skill sessions are attended by students from both programmes and work within the scope of practice of a dental therapist, completing an intra-oral scan before learning how computer-aided design (CAD) software can be used to construct a 3D printed model of a digital 'wax-up' with associated guide for anterior direct composite restorations. BDS students later build on their previous knowledge of digital dentistry by completing another intra-oral scan this time of one of their completed crown preparations and use CAD software to design a suitable restoration. In addition, BDS students also design a cobalt-chromium framework for a removable partial denture ready for 3D-printing. **Early findings/ Results** Only preliminary data has so far been collected as part of a service evaluation questionnaire. 26 respondents out of a possible 79 (32.91% response rate) "The introduction to digital dentistry sessions were useful in expanding my knowledge in this area of dentistry" Strongly Agree 53.7%, Agree 38.5%, Neutral 3.8%, Disagree 3.8%, Strongly disagree 0%. Areas where additional support and feedback would be welcome How best to develop this learning modality, refine our primary research question to take it forward and most appropriate study design to evaluate its efficacy.

Areas where additional support and feedback would be welcome How best to develop this learning modality, refine our primary research question to take it forward and most appropriate study design to evaluate its efficacy.

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16. Exploring Dental Student Professionalism in the Clinical Workplace: contemporary challenges for dental educators

Author Isabelle Cunningham (Bristol Dental School)
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Background, why is this subject area of interest? Personal experiences and conversations with dental teachers suggest there can be frustration with the professionalism of contemporary dental students. Concerns include the challenging of clinical grades and feedback, lateness, lack of learning engagement, and a lack of respect for staff. Student professionalism is expected on clinic early in the curriculum, but there are recognised challenges associated with today's students being university 'customers'. Research to understand contemporary dental student professionalism-related tensions in the workplace is lacking. This Doctorate in Education research aims to address this. **Proposed primary research question** How do professionalism-related tensions between dental students and teachers manifest in the clinical workplace, and why do they occur? **Methods or proposed methods** 1. A free-text questionnaire with three professionalism scenarios to all clinical students and teachers in a UK dental school. 2. Approx. four individual teacher interviews. To include a professionalism-related 'critical incident'. 3. Four student focus groups: in-course students and recent graduates. 4. Individual student interviews, depending on the focus group findings. 5. Repeat teacher interviews using a summary of the student findings. **Early findings/ Results** A pilot study, and the literature, suggests there are many factors that contribute to professionalism-related tensions in the clinic. These include, unclear and varying perceptions of 'unprofessional', generational differences, the expectations placed on young learners, the 'student as customer' and student entitlement, staff-student power relationships, student agency and voice, staff professionalism lapses, and curriculum pressures.

Areas where additional support and feedback would be welcome
Using a summary schematic, I would value audience perspectives (as I start data collection) as to what they consider to be significant reasons for professionalism tensions in the clinical workplace.

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17 Assess the impact of social media on the prevalence of tooth whitening amongst students across the United Kingdom

Authors Faris Elsayad, Shreya Aggarwal, Barry Quinn (King's College London, University of Liverpool)
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Background, why is this subject area of interest? Since the outbreak of the COVID pandemic, it has been discovered that individuals are increasingly more self-conscious about their appearance, namely having a 'perfect smile'. The increased usage of social media platforms such as Zoom during this period has led to a multitude of individuals to gravitate heavily towards cosmetic treatment modalities. Tooth whitening is a rapidly emerging cosmetic procedure which is perceived to increase the 'beauty' of your smile leading to an increase demand for solutions. **Proposed primary research question** What is the relationship between social media and university students seeking tooth whitening? **Methods or proposed methods** Qualtrics' software will be used to devise a questionnaire and be sent to the student union representative of each of the universities across the UK for fair and equal distribution. The participants will self-select to participate in the study. From the questionnaire outcomes, we will ensure to use stratified-sampling techniques and a large enough sample size, to ensure that the results are statistically significant. The results of this questionnaire will be statistically analysed in order to determine the outcome of our aim.
Areas where additional support and feedback would be welcome Discussion about distribution of data and accurate data analyses.

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18. Is there an international consensus over the learning outcomes that relate to dental hygiene?

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Background, why is this subject area of interest? The overall purpose of this study is to critically review different approaches to assessment with the aim of informing an appropriate assessment system for development and implementation in the Kingdom of Saudi Arabia (KSA). Currently, in KSA, dental hygiene programmes follow a traditional design approach, where each specific module is assessed in isolation. However, data suggest that such approaches to assessment likely fall short of providing credible and trustworthy evidence of real-world competency. However, carefully implemented outcome-based education (OBE) approaches could provide a solution. Therefore, an early avenue of research was to explore the current spectrum of learning outcomes provided by four international stakeholders (KSA, Europe, USA and UK) that could underpin a new OBE strategy in KSA. The aim of this study was to ascertain: (a) the outcomes that represent a consensus, and thus inform an 'agreed' and transferable scope of dental hygiene practice; and (b) those outcomes that are variable, and therefore likely reflect cultural differences. **Proposed primary research question Development** of a credible clinical framework of assessment for Dental Hygiene Students in KSA. **Methods or proposed methods** The learning outcome mapping process began with a comprehensive review of the literature to define the national regulator in each location for dental hygiene as a speciality. Subsequently, the appropriate documents were selected used to create a relational map of stakeholder outcomes by linking common outcomes across stakeholders, while at the same time identifying those outcomes that substantially differed. **Early findings/ Results** Each regulator among these four different areas used its own framework and approach to categorising the outcomes by underlying themes of commonality or domains. In the UK, the outcomes were grouped into four domains, and the regulator stressed the importance of integration among these four domains and offered this as an explanation for why a single outcome could be found in multiple domains. Likewise, in Europe, the outcomes referred to as "major competences" were grouped also into four main domains. However, in the USA the difference in the domains structure is notable, as the regulator used "competence" approach to categories the core learning outcomes into five general domains. Finally, in KSU, the grouping was more basic and had much fewer learning domains when comparted to the other three stakeholders. The learning outcomes were mapped based on Harden et al. (1999) three-circle model for classifying learning outcomes. The model was originally developed for medical doctor outcomes. However, in 2004 Clark, Robertson and Harden, adapted the model to fit dentistry. The three-circle model was chosen because it brings the needed focus to teaching, learning and most importantly assessment. The map was analysed according to two main criteria: first, the content and scope of each outcome within the dental hygiene practice, second, the written outcomes format and structure against general guidelines. This map represents the areas of competence for future dental hygienists by outlining the commonalities among four different international stakeholders. In addition, it has also identified areas of international difference such as 'safeguarding'.
Areas where additional support and feedback would be welcome Comments over the mapping approach and identify where the approach might be approved. Applications of the approach to other dental disciplines, and the potential to facilitate international mobility.

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19. Are dental interns in Saudi Arabia clinically competent? A qualitative interview study of the clinical supervisor.

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Background, why is this subject area of interest? While there exists a competency framework for medical graduates in the Kingdom of Saudi Arabia, the competency profile of the newly qualified Saudi dental students is unknown. This PhD study is the first attempt to picture such profile by the means of structured interviews of the key stakeholders. This chapter explores the perception of Saudi clinical supervisors of a competent dental intern attending their clinical rotation. **Proposed primary research question** How do clinical supervisors perceive a competent dental intern? **Methods or proposed methods** In this qualitative study a total of six semi-structured interviews were conducted with clinical supervisors in charge of supervising dental interns. **Early findings/ Results** Thematic analysis was conducted with five main themes, and 12 sub-themes identified. Despite the limitations of this study, it was felt that the supervisors agreed on the following three pillars to form the professional competence of a Saudi dental intern:(1) A safe practitioner who is aware of their own limitations and can manage dental emergencies as the bare minimum. Such practitioner can take a thorough history, examine the patient effectively, order special investigation, interpret the results and formulate a treatment plan. This clinician can get the patient out of pain if needed and deal with dental trauma. (2) A professional individual who can be trusted by their supervisor and respected by their patient as an acting dentist (3) A clinician with experience of undertaking routine dental procedures multiple time so that they have developed the ability to determine the complexity of the task in the outset

Areas where additional support and feedback would be welcome

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