

UNIVERSITY OF GLASGOW

Academic Standards Committee – Summer Powers

Periodic Subject Review: Review of Dental School held on 17 March 2016

Mrs Lesley Fielding, Clerk to the Review Panel

Review Panel:

Dr Donald Spaeth	Dean (Learning and Teaching), College of Arts
Professor Mark Hector	University of Dundee, External Subject Specialist
Professor Jim Anderson	School of Veterinary Medicine, Cognate member
Dr Cathy Bovill	Learning and Teaching Centre
Ms Mhairi Harris	Student member
Professor Karen Lury	Senate Assessor on Court
Mrs Lesley Fielding	Senate Office and Clerk to the Review Panel

1. Introduction

- 1.1 The Dental School is one of three professional Schools within the School of Medicine, College of Medical, Veterinary and Life Sciences. The College was formed in 2010, when a major restructuring exercise reshaped the University from nine Faculties to four Colleges.
- 1.2 The Dental School has a major interface with a number of health boards, particularly NHS Greater Glasgow & Clyde and NHS Education for Scotland, which is relevant to teaching delivery due to the large volume of clinical work undertaken by dental students and the significant amount of NHS revenue provided through the Additional Cost of Teaching (ACT) funding stream which supports delivery of the BDS curriculum.
- 1.3 The School last underwent internal review in March 2010 prior to restructuring. The Review Panel commended the Head of the Dental School and the Senior Management Team for their effective management ability, positive attitude and ethos of education. Additionally, the School was commended for the sense of community that was evident.
- 1.4 The Self Evaluation Report (SER) was compiled by the Head of the Dental School, in association with a PSR Steering Group, which was comprised of key academic and administrative staff. All staff and student Class Representatives were given the opportunity to review and comment on the SER and the later draft was discussed by the Dental School Executive, Glasgow Dental Student Society Committee and with open meetings for both staff and students to provide final feedback.
- 1.5 The Review Panel met with Professor Jeremy Bagg, Head of Dental School, Professor Alan Jardine, Head of School of Medicine, Dr Aileen Bell, Director of Dental Education, Professor Jill Morrison, Dean of Learning and Teaching, College of Medical, Veterinary and Life Sciences, thirty members of staff, one probationary member of staff, twenty-four Undergraduate students from all levels of the BDS programme and 6 Postgraduate Taught students.

2. Background information

2.1 Students

Student numbers for the 2015-16 session were as follows:

BDS 1	78	
BDS 2	74	
BDS 3	92	
BDS 4	85	
BDS 5	94	
Undergraduate Total	423	
Postgraduate Taught	13	12.5

2.2 Staffing

Academic staff	53	
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2.3 The Staff: Student ratio for taught students in 2016-17 is 1:8.3.

2.4 Range of provision

The Review Panel considered the following range of provision offered by the Dental School:

Undergraduate

- Bachelor of Dental Surgery (BDS)

Postgraduate

- MSc Endodontics
- MSc Oral and Maxillofacial Surgery
- Doctorate in Clinical Dentistry (Orthodontics)

3. Context and Strategy

3.1 Context and Vision

3.1.1 As identified in the SER, the Dental School's very clear vision was to 'produce high quality dental graduates to enter the workforce and serve the general population.' The Review Panel was entirely satisfied that the Dental School clearly adhered to the University's Learning and Teaching Strategy and considered that the Dental School offered a robust, holistic provision which had been recently monitored by its appropriate review body, the General Dental Council in 2013.

3.1.2 The SER also provided a full and informative description of the Dental School's interface with the NHS and the associated funding and highlighted that Dentistry has an annual student intake dictated by the Scottish Government and funding which is matched by Scottish Funding Council (SFC). The SER also outlined the various tensions that were created due to the different focuses of the NHS and the University.

3.1.3 In the meeting with the Head of the Dental School, Head of the School of Medicine, the Director of Dental Education and from the SER, the Review Panel noted that the Dental School had undergone a period of substantial change including the development of a new curriculum and new Intended Learning Outcomes (ILOs), as

required by the General Dental Council. The University restructuring had also had significant impact on the Dental School. As outlined in the SER, prior to restructuring, the Dental School was a separate entity with a unique identity which was a key factor in promoting the School within a competitive Higher Education market. A direct effect of restructuring was the reduced visibility of the Dental School through its amalgamation into the School of Medicine. The Panel had noted this with concern; however, at the meeting with the Dean of Learning and Teaching for the College of MVLS, the Panel was pleased to learn that the senior management in the College of MVLS had agreed to an amendment of the title of the School of Medicine to the School of Medicine, Dentistry and Nursing.

- 3.1.4 Whilst the Panel welcomed this decision by the College of MVLS and considered it a pivotal step in acknowledging the important role of the three professional schools within the School of Medicine, it was evident that the Dental School's integration and the obligation to adopt College, School and University structures had presented a number of substantial challenges. These individual issues have been addressed in other areas of the report, however, the Panel perceived a number of disparities between the School of Medicine and the Dental School. Due to the Dental School students undertaking invasive, irreversible procedures on patients, high levels of supervision with high staff:student ratios were required which, whilst a positive experience for the students, limited the time for the Dental School to undertake other activities such as research. This had implications for the cost of delivery of programmes, postgraduate programmes in particular. Hence, the Dental School's primary source of funding was through its teaching.
- 3.1.5 The Review Panel considered the Dental School had responded to restructuring in an innovative and resourceful manner, ensuring the maintenance of standards and engaging with both the School of Medicine and the College of MVLS. In order to avoid the loss of momentum on key issues through the School and College reporting structures, the Dental School had developed strategies to ensure key issues were addressed at Dental School level with the effective use of existing groups such as the Dental Executive Committee. However, the Panel had concerns regarding the sustainability of this strategy in the long term, particularly in relation to clinical and postgraduate provision (discussed in more detail at 4.1.4). In order to safeguard and secure the excellent work undertaken by the Dental School, the Review Panel **recommends** that discussions take place with the College and School of Medicine to clarify reporting structures in order to minimise overlap, to avoid issues in Dentistry being overlooked and to improve communication between committees in the Dental School and those in the College and School of Medicine.
- 3.1.6 The Review Panel discerned from the SER and meetings with staff and students that the exemplary leadership of the Head of the Dental School has been pivotal to the ongoing success of the Dental School and considered that, in the event of a change of leadership, the current system may not be sustainable. Therefore, the Panel **recommends** that the Dental School should engage in succession planning to ensure continuity of leadership.

3.2 Strategic approach to enhancing learning and teaching

The Review Panel noted that the teaching provision was closely aligned with the University's Strategic plan 2015-20. The Review Panel considered that the Dental School undertook this provision in an exemplary manner offering holistic provision that was monitored and approved by its appropriate external review body, the General Dental Council, in 2013. The Dental School had created a stimulating and supportive environment for students. The standard of provision was evidenced by the Dental School's consistently high position in various published league tables of UK dental schools and the Dental School's inclusion as the top option for dentistry in the 2016 Complete University Guide.

4. Enhancing the Student Experience

4.1 Admissions, Retention and Success

- 4.1.1 The Dental School's admissions for undergraduate applicants are handled locally whilst applications for postgraduate programmes are handled by the Marketing, Recruitment & International Office (MaRIO). The undergraduate admissions target was set by the Scottish Funding Council (SFC) based on projected dental workforce requirements. In the preceding three sessions, the target intake for Home/EU/RUK students was reduced from 87 in 2012-13 to 67 in 2014-15.
- 4.1.2 To offset the financial impact of this reduction the Dental School was permitted to increase the number of international students from 3 in 2012 to 11 in 2014. The Scottish Government had imposed stringent conditions on the international students which required them to be under a 'closed loop' agreement which required the students to return to their home country after graduation and to pay a proportion of the NHS ACT costs. These conditions have complicated the recruitment of international students and intensified the tensions between meeting the various requirements of the College, SFC and Scottish Government whilst ensuring equitable treatment of students applying to the Dental School.
- 4.1.3 It stated in the SER that, since the last review, the Dental School's involvement with widening participation had developed substantially through involvement with the Reach Programme. The Review Panel was pleased to meet a student who had applied through the widening participation route. The student had commenced the programme in fourth year of school and attended a summer school during fifth year. The student advised the Panel that this had been a positive experience and offered the opportunity to meet other students and to experience the BDS timetable. The Review Panel **commends** the Dental School's participation and proactive approach to Widening Participation.
- 4.1.4 The Dental School offers a modest number of postgraduate taught programmes and the Review Panel noted, from both the SER and meetings with students and staff, that the numbers of students enrolled to these programmes was very small. Additionally, it was evident that the management of postgraduate provision and pastoral care required for international postgraduate students was disproportionate in terms of time when compared to the undergraduate programme. Due to the intensiveness of support and staff time required, the Panel explored the sustainability of the current postgraduate provision on an FEC funding model and noted that the postgraduate programmes provided useful additional income and conformed with the University's Strategic Plan.
- 4.1.5 The Panel discussed the process for developing new postgraduate programmes within the Dental School and noted that new programmes were introduced within existing additional resources, as is the practice within MVLS. The Panel **recommends** that the College, School of Medicine, in conjunction with the Dental School should, in reviewing new and current programmes, balance potential income against competing demands upon staff resources.
- 4.1.6 Staff advised the Panel that, whilst they considered there was a potential market in which to increase postgraduate student numbers, there were a number of prevailing challenges. In order to sustain any increase in postgraduate student numbers, it would be essential for the Dental School to further develop existing facilities. The Panel noted that the clinical accommodation component would be the most expensive element, in addition to extra nursing support. However, if there was a further reduction in undergraduate numbers, this would possibly release clinical space for increased postgraduate provision.

- 4.1.7 The postgraduate students intimated to the Panel that they would welcome a programme which provided three years of clinical experience to qualify them to sit relevant clinical specialist examinations at the Royal Surgical Colleges. Staff supported this suggestion and considered there was a viable market for such a programme especially among international students. Further to this, the Panel learned that the Dental School had considered the introduction of a two year programme with a third year of clinical attachment. However, there were impediments due to the clinical placement year being categorised as employment, which would pose difficulties in relation to visas for international applicants. Additionally, such programmes would be more expensive due to the inclusion of NHS provision.
- 4.1.8 In order to determine whether increasing postgraduate provision would be cost-effective, the Dental School's core courses had been converted into University-based cluster teaching and a business plan was being developed for each programme which would indicate what additional resources would be required. Similarly, the Panel noted that the School was investigating the potential market for a postgraduate programme in Endodontics which could also be offered as Continuing Professional Development for home students.
- 4.1.9 The Review Panel considered there were a number of qualities present in the Dental School that would contribute to the development of further postgraduate programmes. The Dental Hospital's reputation and the base of research expertise available would be attractive to potential students, in addition to a wide range of provision through bespoke programmes (non-clinical) and the availability of community based projects. However, the Panel accepted there were a number of factors impeding further development of the current postgraduate provision at this time. In order to enable the Dental School to capitalise on their excellent teaching and clinical resources, the Review Panel **recommends** that the Dental School, where possible, explore existing links for potential to extend current provision and build a wider postgraduate portfolio.
- 4.1.10 The Review Panel noted the Dental School's excellent retention and progression rates.

4.2 Equality and Diversity

4.2.1 As outlined in the SER, the General Dental Council (GDC) agreed that the Dental School met the three requirements in relation to Equality and Diversity as outlined in the GDC's Standards for Education document. The Review Panel noted from the SER that all staff undertook the University's on-line training programme on Equality and Diversity. The Panel was pleased to note that the Dental School committees all have Equality and Diversity as a standing agenda item which is evidenced by the clear efforts of the Dental School and student body to create an inclusive environment through the supply of a 'quiet room' which was used for a range of activities from quiet contemplation/prayer to hosting social events where no alcohol was served. non-alcohol social events. The Panel noted that the students received teaching on Equality and Diversity Law through the Ethics, Professionalism and Law courses and through community placements. The Panel **commends** the Dental School for the establishment of the Professionalism and Ethics Study Club – All Years (PESCAAY), which brought staff and students together for the discussion of current aspects of ethics and professionalism.

4.2.2 The Panel was pleased to note that the School of Medicine, in preparation for the Athena SWAN charter, was enhancing staff mentoring as a key element of its Athena SWAN action plan.

4.3 Supporting Students in their Learning

- 4.3.1 Both the undergraduate and postgraduate student groups expressed their appreciation for the support provided by the staff throughout the Dental School, citing the strong sense of community, excellent mentoring programme and approachability of staff. The level of support, as also outlined in the SER, was evident from the pastoral support provided to students and also in the role of the Dental School Student Support Group which identifies students who may be struggling and initiates a support network. The Panel **commends** the Dental School on the high level of support provided to students and, in particular, the Dental School Student Support Group
- 4.3.2 The Review Panel noted from both the SER and interactions with staff and students that the mentoring system was an essential and worthwhile component of student support provided by the Dental School. The mentoring afforded opportunities to meet with their mentor three times per session throughout their studies. The undergraduate students universally expressed their appreciation of the mentoring system and its role in developing their ability to reflect on what they had learned and their learning needs. The Panel **commends** the mentoring system as an invaluable element in developing student life skills.
- 4.3.3 Some of the undergraduate students had expressed reservations regarding the assignment of non-academic staff as mentors, viewing this as a disadvantage compared to those students assigned an academic member of staff. The Review Panel explored this with both the Head of the Dental School and staff and was reassured that there were no disadvantages to the students. The role of mentor related to the development of life skills and not clinical aptitude and both academic and administrative staff received the same mentoring training. Further to discussions with staff, the Panel established that mentoring was undertaken by MPA staff on a voluntary basis but was not included in their job descriptions. Although the Panel understood that the Dental School highly valued the contribution of MPA staff, it feels that the nature of the role needs to be clear and transparent, for the sake of both staff and students. Therefore, the Panel **recommends** that the Dental School should consult with College HR regarding whether it would be appropriate to include the mentoring role in the relevant MPA job descriptions, in order for staff to continue in the role. The School should also clarify to students the non-clinical nature of mentoring, whether provided by MPA or academic staff.
- 4.3.4 As outlined in the SER, due to the loss of the staff member responsible for the mentoring programme, there had been some difficulties with the programme due to an absence of firm leadership and insufficient time for the training of new mentors. Due to its integral role within the BDS programme, the Dental School had invited the Learning and Teaching Centre to assist in a review of this provision. The Panel supported this move, however, considered that there were other issues, such as staff recruitment, that needed to be addressed as part of the review. Therefore, the Panel **recommends** that the Dental School and School of Medicine review support mechanisms for the mentoring programme to ensure that the difficulties identified with regard to leadership and training are addressed.
- 4.3.5 The Review Panel explored with students whether there was a sense of 'isolation' due to the geographical distance between the Dental School and the main campus. The students considered they were not disadvantaged by the geographical separation and provided examples of involvement with the main campus. This geographical separation was offset by the strong sense of identification among students and staff with the Dental School, appreciating the strong collegiate and family atmosphere. The Review Panel **commends** the Dental School for creating this strong sense of community.
- 4.3.6 With regard to University facilities, the students advised that they used the library on campus, but commented that, with regard to other facilities, students were required to

physically go to the University to book a number of services. The Panel noted that due to the requirements for NHS staff to give six weeks' notice to cancel a clinic, it was difficult to attend development opportunities as the College tended to give only two weeks' notice of such events. The Panel suggests that the College and School; investigate means of making it easier for Dental School staff and students to participate in events through online booking and advanced notification of upcoming events.

- 4.3.7 The students reported that documentation was available for all years of the BDS programme and supporting information provided as to what students needed to do to achieve all the ILOs. There was the practice whereby lecturers advised students, at the beginning of a lecture, what ILOs would be addressed. This information was also available on Moodle.
- 4.3.8 As noted from the SER, the Dental School's student progression and retention rates had been consistently high over a number of years with almost all the Dental School's graduates securing employment. The Review Panel was pleased to note that the Dental School continued to develop Graduate Attributes with the introduction of a Graduate Attributes week in BDS 5 which offered students, among other things, Personal Development Planning.
- 4.3.9 The undergraduate students were familiar with the issue of graduate attributes and were confident that they had developed the requisite graduate attributes throughout the programme. The students considered that, due to the mentoring system, their ability to reflect on issues was well developed whilst involvement in different areas, such as the student committees, promoted additional transferrable skills. The undergraduate students deemed the information on graduate attributes distributed by the main campus was not helpful and commented that the Dental School was better positioned to assist students in this area. There was a sense among the students that the University, in general, was less aware of the requirements for dentistry and cited the GDC's learning objectives as being better designed for dentistry than those supplied by the University. The Panel considered that, as the delivery and support of these objectives impacted most on the students, this awareness reflected the success of the Dental School in implementing the learning objectives.
- 4.3.10 Students had confidence that any weaknesses in their performance would be detected by the school through their reflective work and clinical skills which were reviewed by the Year head.

4.4 Student Engagement

- 4.4.1 The Panel explored with students how the Dental School ensured that students undertook all necessary clinical work. The students advised that if a deficit in clinical practice was identified, additional clinical work could be undertaken through the outreach clinics to redress this. The students were of the view that undertaking clinical practice within the Dental School was more difficult due to the lack of a patient base and the service's vulnerability to patients failing to attend. The External Subject Specialist queried whether NHS managers prioritised student clinics when referring patients. Additionally, the students reported that due to a perceived shortage of available nursing staff, students felt they had to undertake nursing tasks thus reducing the time for clinical practice.

4.5 Effectiveness of Student feedback mechanisms

- 4.5.1 Further to discussions with students and staff the Review Panel was confident that the Dental School processes fully addressed issues of concern. The undergraduate students expressed satisfaction with the feedback mechanism through the Staff-Student Liaison Committee (SSLC) with updates on the resolution of issues reported to students.

4.5.2 The Panel discussed the National Student Survey (NSS) results for 2015 with staff and noted that due to the small numbers of students, a small number of negative responses would impact substantially on the NSS results. The Panel was pleased to note the proactive manner in which the Dental School fully engaged with these responses, with the Dental Education Committee's engagement with the process to ensure that areas of concern were fully addressed.

4.5.3 The postgraduate students advised the Review Panel that there was no formal process for student representation within the Dental School. Due to the small numbers of students and the close working relationship with their supervisor, issues were raised directly with their course coordinator and the students were satisfied that their concerns were fully addressed. However, the Panel was later informed that there was student representation on the Postgraduate Management Committee as well as on the Information Services Committee and the Library Committee. The Panel **recommends** that the Dental School undertake steps to ensure that the postgraduate students are made aware of the formal processes for student representation.

Enhancement in Learning and Teaching

5.1 Learning and Teaching

5.1.1 Curriculum Design

5.1.1.1 The existing BDS curriculum was introduced in 2004 in response to a critical review of the previous curriculum by the GDC. The previous curriculum, as stated in the SER, was judged to place insufficient emphasis on integrated teaching, holistic care, teamwork and early clinical experience. The new curriculum was constructed to address these issues, whilst simultaneously ensuring that current approaches were used for the delivery of clinical education and assessment.

5.1.1.2 The undergraduate students were unanimously positive about the curriculum. As the BDS curriculum involved approximately 20 weeks of clinical teaching in outreach settings, the Panel asked students about the primary care visits. For the BDS1, 2 and 3 students, these placements were undertaken through the Childsmile programme. Whilst appreciative of the experience, the students advised that placements which took place prior to the Childsmile lectures were more useful as the lectures were then more relevant. This, however, was not always possible due to the difficulties in securing and organising the appropriate number of places. The students were not concerned about the absence of suitable work placements and did not view this as being detrimental to their degree, particularly in view of the outreach clinics which are described at 5.1.1.3. The students expressed confidence in the Dental School's ability to address any issues that arose in connection with placements.

5.1.1.3 As noted in the SER, the BDS 5 students undertake a substantial proportion of their teaching in outreach clinics. These outreach clinics are located in areas where a particular clinical need has been identified and are entirely funded by central government via NHS Education for Scotland (NES). At their meeting with the Panel the students were unanimously positive regarding the outreach programme which was viewed as an essential element of the BDS. The exposure to a dental practice-like environment was viewed as invaluable and provided the opportunity to catch up on any incomplete component of a student's clinical training. Students advised the Panel that they would welcome involvement with the outreach clinics at an earlier stage in the BDS programme.

5.1.1.4 As noted in the SER, the BDS curriculum is largely prescriptive which offers very little choice to students. To address this, the Dental School offers students in year 4 of the BDS programme the opportunity to select an elective period project in a subject of their choice. The Dental School had endeavoured to develop the elective options by

establishing institutional links and international partnerships to widen the range of options available to the students. The students were positive regarding the elective programme and satisfied that most choices were accommodated. The Review Panel considered that the elective programme offered students an invaluable opportunity for extracurricular activities and **commends** the Dental School on the development work undertaken on their elective programme.

5.1.1.5 The students would welcome the opportunity to undertake Study Abroad or Erasmus opportunities as offered by other universities. However, in the meeting with the Head of the Dental School, the Panel learned that such exchanges were not permitted due to concerns that overseas placements could result in gaps in a student's curriculum. There were further concerns regarding language issues in clinical settings.

5.1.1.6 The Dental School offers three postgraduate programmes, which are primarily focused on the international market. The Review Panel noted from the SER that two postgraduate programmes, the Masters in Primary Dental Care and Fixed and Removable Prosthodontics had been suspended due to the retirement of key staff and low recruitment. The Panel also noted that a new postgraduate Masters in Oral Sciences would be offered from 2016-17 as part of the Clinical and Medical Sciences cluster of postgraduate programmes within MVLS.

5.1.1.7 The postgraduate students who met with the Review Panel expressed their overall satisfaction with the curriculum. Students advised, however, that the Research Methods and Statistics course, in its present form, was insufficient for their needs and expressed the preference for more in-depth teaching to enhance their understanding of the subject. The Panel was pleased to learn that the Director of PG Affairs planned to review the postgraduate provision in coordination with the Dental Executive Committee with the intent to align the scope, value and processes with the Undergraduate programme. The Panel suggests that the Dental School include, for review, the Research Methods and Statistics course in light of the postgraduate students' suggestions.

5.1.2 Approach to Intended Learning Outcomes

5.1.2.1 The Panel noted that central to the BDS curriculum was Constructive Alignment which began with the development of Intended Learning Outcomes (ILOs) published by the GDC. In response to the introduction of a new set of outcomes called Preparing for Practice, the Dental School had undertaken a major mapping exercise to ensure correspondence with the new GDC outcomes which had been commented on favourably by External Examiners. The Panel considered that this process was exemplary and **commends** the Dental School for this work and supports plans to extend assessment blueprinting to PGT programmes.

5.1.3 Technology Enhanced Learning and Teaching

5.1.3.1 The Review Panel was pleased to observe the impressive and innovative technological developments during the guided tour of the Dental School and as described in the SER. The Panel observed students performing work on Patient Simulators (Phantom Heads), and demonstrating CPR with the use of an Automated External Defibrillator. Students were appreciative and enthusiastic about the benefits of the technology offered as outlined below. Whilst the success of technology was variable as evidenced with the 3D model and Echo 360, the Panel **commends** the Dental School on the proactive approach of staff in enhancing the student experience through the development of technology.

5.1.3.2 The undergraduate students were most complimentary with regard to the Flipped Classroom which requires students to undertake preparatory work in advance of the Practical Clinical Class which allows for more practical work to be undertaken during

the practical class itself. The students found this feedback based learning approach more productive and appreciated the benefits that this method of teaching offered. Access to videos demonstrating different clinical operative techniques was available, via Moodle, both before the practical clinical skills session with the phantom heads and after the session for further review, consolidation and final revision before performing the task on patients in the clinic. The Panel considered this was high functioning education and was pleased to note that this was being rolled out throughout the Dental School. The Review Panel was most impressed with this innovation and **commends** the Dental School on this development. The Panel suggests that the Dental School should demonstrate the Flipped Classroom to relevant areas within the University and considers this an example of good practice.

5.1.3.3 The Panel noted the positive developments with regard to the introduction of the electronic system for recording assessment of clinical dental procedures, Longitudinal Integrative Foundation Training Undergraduate to Postgraduate Pathway (LIFTUPP), designed to replace the paper-based Record of Clinical Assessment and Feedback (ReCAF). LIFTUPP would be used by all students from session 2016-17. The students were positive, overall, about the system and considered it was an effective method of interacting with the clinician and a useful tool in highlighting areas where additional clinical work was required. LIFTUPP is also used for the recording of work undertaken on Phantom Heads available in the clinics should students' patients fail to attend for their appointments and in due course will also be extended to the Pre-Clinical Skills Course. As noted in the SER, 'the marking scheme is based on the degree of independence with which students are able to perform procedures and written feedback is mandatory where grades fall below pre-set thresholds.' (4.2.5 p35) A few students held the view that, as assignments graded 3 or below required comment, some clinicians would rate a student 4 and above to avoid having to do so. The Review Panel suggests that the Dental School consider introducing the requirement whereby feedback is provided for all grades.

5.1.3.4 The Review Panel were most impressed by the demonstration of the 3D anatomical model of the head and neck which provided students the opportunity to experience, among other things, spatial awareness of anatomical structures. The Panel noted that this technology had been a major investment with significant support from the NHS Education for Scotland. However, as noted in the SER and from meetings with staff and students, staff had displayed reluctance to engage with this technology, despite the availability of drop-in training sessions. Students appreciated the potential benefits of this technology, but agreed, unanimously, that it was under-utilised. The Panel noted the practical limitations associated with the 3D model due to the small numbers (15) who could view the 3D version at one time. Therefore, the Panel welcomed the Dental School's plan for the introduction of a 2D version which students could download on their personal devices and use as a study aid. The Dental School had invested in additional computers in the lecture theatres and other teaching facilities which should facilitate students' ability to access this technology. However, the Panel considered that the 3D model, if fully utilised, was a valuable teaching asset and **recommends** that the Dental School reflects on other methods of encouraging staff to fully engage with, and to utilise, this technology.

5.1.3.5 As stated at 5.1.3.1, the Review Panel was most impressed with the level of engagement in developing innovative and exciting technology within the Dental School which offered an enriched learning experience to students. The Panel noted the participation of the very active members on the College Technology Enhanced Learning and Teaching group. In order to provide additional support to enable further development and full utilisation of these innovations, the Review Panel **recommends** that the Dental School discuss how best to build on this good practice.

5.1.4 Assessment

5.1.4.1 The Dental School employed a wide range of assessment methods which were aligned to the ILOs for Knowledge and the application of knowledge, practical application of knowledge and demonstration of clinical competence and habitual performance of clinical skills. The assessment methods employed included written formats such as Single Best Answer Multiple Choice and Multiple Short Answer. Assessment of practical application of knowledge included structured clinical and clinical science assessment and preclinical Skills Assessment. Demonstration of clinical competence included Objective Structured Clinical Examinations (OSCE) and Clinical Competence Assessments. Oral assessment was also demonstrated through group presentations.

5.1.4.2 The Review Panel was most impressed with the Dental School's practice of assessment blueprinting which was undertaken to confirm the proper alignment of assessment methods and the adequacy of ILO sampling. The Panel considered that assessment blueprinting was a model of good practice and **commends** the Dental School for this excellent practice.

5.1.5 What/How do students receive feedback on assessed work

5.1.5.1 The Review Panel noted that the feedback process was praised by both students and External Examiners. The undergraduate students expressed overall satisfaction with the feedback provided by staff, and commented that, although it was not possible for staff to provide feedback on all formative assessments, this was offset by staff availability during clinics to provide oral feedback. Indeed the students stressed that the interaction in clinics with the clinicians and patients provided the most valuable form of feedback. The Panel considered that the Dental School made good use of formative feedback that involved self-assessment as a way to enhance the ability to self-assess

5.1.5.2 The Panel noted that dentistry has very high contact hours with constant feedback provided by staff in clinics. With regard to the students issues surrounding feedback; the Panel applauds the Dental School's response to this issue through the development of a strategic focus on how feedback was provided which outlined education days and meetings between students and their year coordinators.

5.1.5.3 Whilst the postgraduate students were generally appreciative of the feedback provided they commented on some inconsistencies particularly in relation to core courses and expressed a preference for written feedback instead of verbal feedback. The Panel **recommends** that the Dental School review the current method of providing feedback to postgraduate students.

5.2 Engaging and Supporting Staff

5.2.1 The Panel met with one member of probationary staff who was in the second year of the Early Career Development Programme. From their discussion, the Panel learned that whilst the probationer had a full workload the line manager and Head of the Dental School had been very supportive and aided the development of the individual.

5.2.2 The Panel explored the promotions criteria for staff and what support was provided by the School with regard to individual career development. Staff informed the Panel that Clinical academic staff who held honorary Speciality Registrar (StR) contracts with the NHS had specialist training and the standard NHS review programme called the Annual Review of Competence Progression (ARCP) which worked well. However, some difficulties arose due to the delay between the end of the ARCP and linking into the University's P&DR process. This affected clinical lecturers, as they were uncertain regarding their future employment until the end of a fixed term.

- 5.2.3 The Review Panel had noted from the SER the challenges that University Teachers encountered in relation to career development. The Panel raised this issue with staff who confirmed that they faced difficulties in satisfying the University criteria for promotion. Some University Teachers had successfully gained promotion to Senior University Teachers. However, as outlined in the SER, the Panel was aware that work was underway to revise the criteria for promotion under the leadership of the Vice Principal (Academic & Educational Innovation) and it was hoped that this would resolve these challenges.
- 5.2.4 The Review Panel explored the issue of 'isolation' with staff and discerned that, whilst staff had a strong sense of identity within the Dental School, they also had interaction with the main campus, although on a practical level this was more complicated due to the restrictions of the Dental School's clinical schedule. However, the Panel noted that, in relation to the School of Medicine and the College of MVLS, there was a sense of 'invisibility' and being 'out of the loop' among the staff group. Similarly, staff considered that this applied to the wider University as evidenced by the development of University systems which were not compatible with those of the Dental School.
- 5.2.5 The Review Panel had noted from the SER the unique nature of the professional programmes which, with the fixed curricula, integrated timetables and clinical placements were often not compatible with the requirements of the generic University systems. Administrative staff advised that it had been necessary to develop 'workarounds' to enable the Dental School processes to be integrated with those of the University. This demanding and time consuming process was then further compounded by the impact of these modifications on other University systems such as the Workload Model. It was evident to the Panel that a number of the University systems were not compatible with those of the Dental School. In view of the requirements of the professional programmes, as outlined above, the Review Panel **recommends** that the College, School of Medicine and the Dental School continue to engage with Student Lifecycle Support and Development to discuss the Dental School's current systems with a view to identifying methods to improve compatibility and integration with the University systems, where this would improve the staff and student experience.

5.3 Resources for Learning and Teaching (staffing and physical)

- 5.3.1 The Review Panel was concerned to learn of difficulties that restructuring had presented in the area of the teaching of life sciences. Key factors that had impacted on the availability of life sciences subject specialist staff included the redeployment of teachers to research institutes and the loss of a number of School of Life Sciences (SoLS) staff due to retirement and resignation. In order to deliver the required teaching, non-subject specialist staff from the Dental School undertook significant amounts of this teaching during 2015-16 which was not in alignment with the Dental School's quality enhancement agenda. The Panel noted, from the SER, that the School of Medicine and SoLS were working to address the shortfall in life sciences subject specialist staff through the University Planning and Budgeting round to bid for staffing resources. The Panel would hope that this issue will be resolved in the near future and **recommends** that an update report be submitted on the status of life sciences teaching within the Dental School.
- 5.3.2 The Review Panel noted both from the SER and from discussions with staff the challenges that a heavy teaching load presented within a research-driven environment. Hence, due to the high level of teaching required by the Dental School, the appointments of University Teachers were found to be more advantageous than the appointment of research active staff. However, it was evident that the teaching driven focus of the Dental School was at odds with the research driven focus of the College. As noted in 3.1.4, the requirements of the Dental School were very specific

in view of the clinical and teaching commitments required to successfully deliver the BDS programme.

6. Academic Standards

- 6.1 The Review Panel noted that the approach to academic standards was obviously taken very seriously, as reflected in the General Dental Council report. The examiner training and calibration processes were robust and ensured standards of marking evidenced by the description of the 'safe beginner' as the aim for all students upon graduation.
- 6.2 The Review Panel noted the highly positive nature of the External Examiner reports. The External Examiners expressed their satisfaction with the Dental School's processes, particularly standard setting, feedback and the level of support offered to students.

7. Collaborative provision

- 7.1 The Dental School is involved in a number of collaborative arrangements which are Scottish Government funded and administered by NHS Education for Scotland (NES). These include the outreach programmes which provide clinical teaching in outreach settings for BDS 5 students. For BDS 1, 2 and 3, there are health visitor, nursery and primary care visits linked to the national oral health improvement programme Childsmile.
- 7.2 As outlined in the SER, from 2017, the Dental School will admit up to five students annually from the International Medical University (IMU) Dental School in Kuala Lumpur to enter Year 3 of the BDS programme, following successful completion of 2.5 years of study in Phase 1 of the Dentistry Programme at IMU.

8. Summary of perceived strengths and areas for improvement

8.1 Key strengths

The Panel identified a number of strengths:

- Excellent staff-student relationships, evident from the strong sense of community
- Well supported, appreciative and articulate student body
- Effective quality assurance and quality enhancement procedures.
- Excellent assessment including blue printing and standard-setting
- Excellent Intended Learning Outcomes

- Widening Participation
- High progression rates and employability.
- Technological innovations

8.2 Areas for improvement

The Review Panel highlighted the following areas as opportunities for improvement:

- Postgraduate provision

8.3 Conclusion

The Review Panel guided by the views of the External Subject Specialist confirmed that, at the time of the Review, programmes offered by the Dental School were current and valid in light of developing knowledge in the discipline, and of practice in its application.

The Panel was extremely impressed with the dedication and enthusiasm of the committed, skilled staff and with the firm focus on excellence in teaching and support for students. The

Panel considered the Dental School to be among the best Units reviewed by Panel members in terms of their provision in areas including teaching, student rapport and feedback. The student groups were enthusiastic and positive, and a credit to the School.

The School demonstrated a number of strengths, as well as an awareness of the areas requiring improvement. The most substantive of these are reflected in the commendations and recommendations below.

Commendations

The Review Panel commends the Dental School on the following, which are **listed in order of appearance** in this report:

Commendation 1

The Review Panel **commends** the Dental School's participation and proactive approach to Widening Participation. [Paragraph 4.1.3]

Commendation 2

The Panel **commends** the Dental School for the establishment of the Professionalism and Ethics Study Club – All Years (PESCA Y), which brought staff and students together for the discussion of current aspects of ethics and professionalism. [Paragraph 4.2.1]

Commendation 3

The Panel **commends** the Dental School on the high level of support provided to students and, in particular, the Dental School Student Support Group. [Paragraph 4.3.1]

Commendation 4

The Panel **commends** the mentoring system as an invaluable element in developing student life skills. [Paragraph 4.3.2]

Commendation 5

The Review Panel **commends** the Dental School for creating the strong sense of community for students and staff. [Paragraph 4.3.5]

Commendation 6

The Review Panel considered that the elective programme offered students an invaluable opportunity for extracurricular activities and **commends** the Dental School on the development work undertaken on their elective programme. [Paragraph 5.1.1.5]

Commendation 7

The Review Panel considered that this process of constructive alignment against GDC ILOs was exemplary and **commends** the Dental School for this work and supports plans to extend assessment blueprinting to PGT programmes.[Paragraph 5.1.2.1.]

Commendation 8

The Review Panel **commends** the Dental School on the proactive approach of staff in enhancing the student experience through the development of technology. [Paragraph 5.1.3.1.]

Commendation 9

The Review Panel was most impressed with the innovative use of the Flipped Classroom and **commends** the Dental School on this development. [Paragraph 5.1.3.2]

Commendation 10

The Panel considered that assessment blueprinting was a model of good practice and **commends** the Dental School for this excellent practice.[Paragraph 5.1.4.2]

Recommendations

The following recommendations have been made to support the Dental School in its reflection and to enhance provision in relation to teaching, learning and assessment. The recommendations have been cross-referenced to the paragraphs in the text of the report to which they refer and are **grouped together** by the areas for improvement/enhancement and are **ranked in order of priority within each section**.

Recommendation 1

In order to safeguard and secure the excellent work undertaken by the Dental School, the Review Panel **recommends** that discussions take place with the School of Medicine and College to clarify reporting structures in order to minimise overlap, to avoid issues in Dentistry being overlooked and to improve communication between committees in the Dental School and those in the College and School of Medicine [Paragraph 3.1.5]

The Panel **recommends** that the College and School of Medicine, in conjunction with the Dental School should, in reviewing new and current programmes, balance potential income against competing demands upon staff resources. [Paragraph 4.1.5]

For action: Head of College, Head of School of Medicine, Head of Dental School

Recommendation 2

The Review Panel **recommends** that the Dental School should engage in succession planning to ensure continuity of leadership. [Paragraph 3.1.6]

For action: Head of Dental School

For information: Head of School of Medicine

Recommendation 3

The Review Panel **recommends** that the Dental School, where possible, explore existing links for potential to extend current provision and build a wider postgraduate portfolio. [Paragraph 4.1.9]

For action: Head of Dental School

Recommendation 4

The Review Panel **recommends** that the College, School of Medicine and the Dental School continue to engage with Student Lifecycle Support and Development to discuss the Dental School's current systems with a view to identifying, where possible, methods to improve compatibility and integration with the University systems. [Paragraph 5.2.5]

For action: Head of College, Director, Student Lifecycle Support and Development, Head of School of Medicine, Head of Dental School

Recommendation 5

The Panel noted, from the SER, that the School of Medicine and SoLS were working to address the shortfall in life sciences subject specialist staff through the University Planning and Budgeting round to bid for staffing resources. The Panel would hope that this issue will be resolved in the near future and **recommends** that an update report be submitted on the status of life sciences teaching within the Dental School. [Paragraph 5.3.1]

For action: Head of School of Medicine, Head of Dental School

Recommendation 6

Whilst the postgraduate students were generally appreciative of the feedback provided they commented on some inconsistencies particularly in relation to core courses and expressed a preference for written feedback instead of verbal feedback. The Panel **recommends** that the Dental School review the current method of providing feedback to postgraduate students. [Paragraph 5.1.5.3]

The Panel **recommends** that the Dental School undertake steps to ensure that the postgraduate students are made aware of the formal processes for student representation. [Paragraph 4.5.3]

For action: Head of Dental School

Recommendation 7

The Panel **recommends** that the Dental School and School of Medicine review support mechanisms for the mentoring programme to ensure that the difficulties identified with regard to leadership and training are addressed. [Paragraph 4.3.4]

For action: Head of School of Medicine, Head of Dental School,

Recommendation 8

The Panel recommends that the Dental School should consult with College HR regarding whether it would appropriate to include the mentoring role in the relevant MPA job descriptions, in order for staff to continue in the role. The School should also clarify to students the non-clinical nature of mentoring, whether provided by MPA or academic staff. [Paragraph 4.3.3]

For action: Head of Dental School

Recommendation 9

The Panel noted the participation of the very active members on the College Technology Enhanced Learning and Teaching group. In order to provide additional support to enable further development and full utilisation of these innovations, the Review Panel **recommends** that the Dental School discuss how best to build on this good practice. [Paragraph 5.1.3.5]

For action: Head of Dental School, Head of TELT, College of MVLS

Recommendation 10

The Review Panel considered that the 3D model, if fully utilised, was a valuable teaching asset and **recommends** that the Dental School reflects on other methods of encouraging staff to fully engage with, and to utilise, this technology. [Paragraph 5.1.3.4]

For action: Head of Dental School