

# General Dental Council

## Education Quality Assurance Inspection Report

Education Provider/Awarding Body	Programme/Award
Cardiff Metropolitan University	BSc Dental Technology

Outcome of Inspection	Recommended that the BSc Dental Technology continues to be approved for the graduating cohort to register as Dental Technician.
-----------------------	---

**\*Full details of the inspection process can be found in Annex 1\***

## Inspection summary

<b>Remit and purpose of inspection:</b>	<b>Inspection referencing the <i>Standards for Education</i> to determine approval of the award for the purpose of registration with the GDC as a Dental Technician.</b>
<b>Learning Outcomes:</b>	<b>Preparing for Practice (Dental Technician)</b>
<b>Programme inspection dates:</b>	<b>7 &amp; 8 February 2023</b>
<b>Inspection team:</b>	<b>Jim Hurden (Chair and non-registrant member) Chris Parker (DCP member) James Ashworth-Holland (Dentist member) Scott Wollaston - GDC Staff member – Quality Assurance Manager</b>
<b>Report Produced by:</b>	<b>Scott Wollaston GDC Staff member (Quality Assurance Manager)</b>

Cardiff Metropolitan University (“the university”) run both a BSc course and a Foundation Degree (FdSc) course in Dental Technology. The courses are delivered by the Cardiff School of Sport and Health Sciences (“the school”). This report focuses on the BSc course. The inspection was carried out over two full days and focussed on all 3 standards and 21 requirements.

The inspection was conducted as a risk-based inspection following the 2021 annual monitoring return.

The BSc Dental Technology programme has met 14 requirements, partly met 5 requirements, and not met 2 requirements, which has resulted in 6 actions which should be addressed by the next round of monitoring activity.

The inspection team (“the panel”) were pleased to see progress had been made by the school since the last inspection, with another full-time member of staff being recruited. There has also been a new Dean and restructure within the school and the programme team have worked very closely with them over the last few years to accommodate this.

The university has also funded the school getting a new computer-aided design/computer-aided manufacturing (CAD/CAM) suite, where students are introduced to using digital technology.

The GDC wishes to thank the staff, students, and external stakeholders involved with the BSc programme for their co-operation and assistance with the inspection.

## Background and overview of qualification

Annual intake	27 students
Programme duration	72 weeks over 3 years
Format of programme	Year 1: basic knowledge, fundamental skills, simulated cases 2: knowledge, more complex simulated cases, fundamental patient cases, clinical observation 3: advanced knowledge, advanced simulated cases, more complex patient cases, research
Number of providers delivering the programme	One

## Outcome of relevant Requirements<sup>1</sup>

<b>Standard One</b>	
1	Met
2	Partly Met
3	Not Met
4	Met
5	Met
6	Met
7	Met
8	Met
<b>Standard Two</b>	
9	Met
10	Partly Met
11	Partly Met
12	Not Met
<b>Standard Three</b>	
13	Partly Met
14	Met
15	Met
16	Met
17	Partly Met
18	Met
19	Met
20	Met
21	Met

---

<sup>1</sup> All Requirements within the *Standards for Education* are applicable for all programmes unless otherwise stated. Specific requirements will be examined through inspection activity and will be identified via risk analysis processes or due to current thematic reviews.

### **Standard 1 – Protecting patients**

**Providers must be aware of their duty to protect the public. Providers must ensure that patient safety is paramount and care of patients is of an appropriate standard. Any risk to the safety of patients and their care by students must be minimised.**

**Requirement 1: Students must provide patient care only when they have demonstrated adequate knowledge and skills. For clinical procedures, the student should be assessed as competent in the relevant skills at the levels required in the pre-clinical environments prior to treating patients. (Requirement Met)**

The BSc programme is a three-year, full-time course, where students attend campus for their theoretical and practical work, as well as attending Cardiff Dental Hospital to work with real patients in their final year.

In the first year of the course, students do not construct any devices for patients. When they do start working with real patients, all of their work is checked and signed off as safe by a registered Clinical Dental Technician/Dental Technician (CDT/DT). Before the students reach the work placement in the dental hospital in the final year, students must pass all practical work assessments before they are able to work on live patients.

**Requirement 2: Providers must have systems in place to inform patients that they may be treated by students and the possible implications of this. Patient agreement to treatment by a student must be obtained and recorded prior to treatment commencing. (Requirement Partly Met)**

During the inspection, the school showed the panel a copy of the consent form used by the dental hospital for patients to sign and agree to be worked on by a student. The panel considered the consent form to be generic and vague in terms of what part of their treatment would involve student work; there was no specific mention of dental technology students. They also did not consider it to be sufficient for a patient to give informed consent for treatment by a student.

The school should work with the dental hospital to develop a more explicit form which encompasses all pre-registration learners undertaking work involving patients. The school have recently started an initiative where they make and provide gumshields for local rugby players, the panel saw evidence of the information leaflet and consent form for these and this clearly outlined students would be working on the gumshields and the implications of this. This was a good example of what the patient consent form for the BSc students' work could consist of.

**Requirement 3: Students must only provide patient care in an environment which is safe and appropriate. The provider must comply with relevant legislation and requirements regarding patient care, including equality and diversity, wherever treatment takes place. (Requirement Not Met)**

As outlined above, patient care is only undertaken by the students during their final year, in the dental hospital setting. In the pre-inspection information provided to the panel, the school stated that the university has processes in place which ensures all regulations are adhered to at the dental hospital. They also said that they carry out risk assessments and have developed standard operating procedures for all equipment and materials that students encounter during the programme.

The panel have seen copies of relevant risk assessment forms and health and safety policies for the teaching laboratories on site at the school, however there is no patient care being provided in these facilities.

The school provided us with a copy of a memorandum of agreement between the university and the Cardiff and Vale University Health Board which the dental hospital forms part of. This agreement was valid between 2014 and 2018, and no updated version has since been drafted. The school told the panel that since the recent restructure, a new agreement is being drafted currently.

The panel saw no evidence of a process in place between the school and Cardiff and Vale University Health Board that formally reviews the workplace environment. The memorandum states that the university will ensure that students comply with the dental hospital's health and safety regulations, however there is no evidence that the school ensures the validity and appropriateness of the policies and procedures in place at the dental hospital.

The school does not undertake any audit of the workplace environment at all. The panel were therefore not assured that this requirement was met. The school must ensure that they conduct regular visits to ensure the safety and appropriateness of the environment and obtains copies of relevant documents. The school should also update the memorandum of agreement in a timely manner.

**Requirement 4: When providing patient care and services, providers must ensure that students are supervised appropriately according to the activity and the student's stage of development. (Requirement Met)**

All teaching staff employed at the school are registered CDT/DTs. When working in the school teaching laboratory, the school said there is always at least one dental technician present. When the students progress to the dental hospital in the third year, and start working on patients, they are supervised by hospital staff who are registered CDT/DTs also. They will then undertake quality control and sign off any device made by students, before it is sent to the clinic. The panel were assured that this requirement is met.

**Requirement 5: Supervisors must be appropriately qualified and trained. This should include training in equality and diversity legislation relevant for the role. Clinical supervisors must have appropriate general or specialist registration with a UK regulatory body. (Requirement Met)**

The panel were provided with copies of staff CVs prior to the inspection, which assured us that all teaching staff have the necessary registration and qualifications. The school also state that all staff have undertaken equality and diversity training as part of their induction and ongoing employment with the university. As well as this, the academic staff are qualified with educational certification, and regularly attend CPD in education. The panel were satisfied this requirement is met, however would have liked to have seen a central record of completed staff training and their qualifications.

**Requirement 6: Providers must ensure that students and all those involved in the delivery of education and training are aware of their obligation to raise concerns if they identify any risks to patient safety and the need for candour when things go wrong. Providers should publish policies so that it is clear to all parties how concerns should be raised and how these concerns will be acted upon. Providers must support those who do raise concerns and provide assurance that staff and students will not be penalised for doing so. (Requirement Met)**

With the pre-inspection information the school provided the GDC, the panel saw whistleblowing policies for both staff and students, which outlines how to raise a concern and the university's roles and responsibilities in that process. This is also covered within the Professional Practice modules delivered by the school.

We were also provided with a comprehensive handbook, which included fitness to study and fitness to practise policies.

The school also operates a student representative system, and concerns can be raised through this process, or directly to the personal tutor assigned to each student.

**Requirement 7: Systems must be in place to identify and record issues that may affect patient safety. Should a patient safety issue arise, appropriate action must be taken by the provider and where necessary the relevant regulatory body should be notified. (Requirement Met)**

The school centrally record any patient safety issues that are raised and students would be investigated under either the fitness to practise or fitness to study procedures. The school also advised the panel that the programme director would inform the GDC of any patient safety issues caused by a student.

As highlighted above, the panel were assured that the registered CDT/DTs closely supervise and check all work produced by the students, whether that is in the training laboratory or dental hospital setting.

**Requirement 8: Providers must have a student fitness to practise policy and apply as required. The content and significance of the student fitness to practise procedures must be conveyed to students and aligned to GDC Student Fitness to Practise Guidance. Staff involved in the delivery of the programme should be familiar with the GDC Student Fitness to Practise Guidance. Providers must also ensure that the GDC's Standard for the Dental Team are embedded within student training. (Requirement Met)**

As noted under requirement 6, the panel were provided with copies of suitable fitness to practise and fitness to study policies, and the panel were assured these procedures are applied appropriately. The GDC's standards for the dental team document is taught to the students and the policies are covered with the students across all three years of the course.

## **Standard 2 – Quality evaluation and review of the programme**

**The provider must have in place effective policy and procedures for the monitoring and review of the programme.**

**Requirement 9: The provider must have a framework in place that details how it manages the quality of the programme which includes making appropriate changes to ensure the curriculum continues to map across to the latest GDC outcomes and adapts to changing legislation and external guidance. There must be a clear statement about where responsibility lies for this function. (Requirement Met)**

The school provided us with a copy of their Academic Handbook, which covers overall quality assurance of the programme, modifications, evaluation and periodic reviews. The responsibility for this sits with the university's Quality Enhancement Directorate. They conduct a quinquennial review of the programme.

Since the school's restructure, the dental technology department now falls under the health sciences directorate, and the quinquennial review was of the whole of health sciences, to ensure a consistent approach across all programmes. The panel were provided with a copy of

the latest quinquennial review, which is dated October 2021. It is a detailed document which highlights areas for improvement and suggestion of changes to ensure all programmes are mapped appropriately to learning outcomes.

Furthermore, during the inspection the school told the panel that they produce module review summaries at the end of each module, and it is formed from a survey completed by the students.

**Requirement 10: Any concerns identified through the Quality Management framework, including internal and external reports relating to quality, must be addressed as soon as possible and the GDC notified of serious threats to students achieving the learning outcomes. The provider will have systems in place to quality assure placements. (Requirement Partly Met)**

The university requires all programmes to undergo an annual Programme Enhancement Plan (PEP), which utilises all forms of feedback collated over the year, from committee minutes, student feedback and external examiner reports. The school told the panel that any concerns that arise from the PEP are reported to the GDC in the annual monitoring return.

Within the quinquennial review report, the comments identify that a suggested change that was highlighted with the school was not responded to by the programme team. These were only minor suggestions and not major action issues. The report does identify that although the team did not respond to the issues through the process as expected, there were discussions held with the team. However, the school should ensure that they formally respond to and address issues raised through this procedure.

**Requirement 11: Programmes must be subject to rigorous internal and external quality assurance procedures. External quality assurance should include the use of external examiners, who should be familiar with the GDC learning outcomes and their context and QAA guidelines should be followed where applicable. Patient and/or customer feedback must be collected and used to inform programme development. (Requirement Partly Met)**

With the above-mentioned quinquennial review processes, the panel were satisfied that the internal quality framework is robust. The school provided copies of various minutes from the Programme Committee and Learning and Teaching Committee. The programme does benefit from the use of an external examiner (EE), and the panel have seen copies of the latest EE reports, which are produced annually. The EE is a GDC registrant, however the programme team were unable to tell the panel if the EE had had an induction with the university.

In the latest EE report in 2022, the programme team had not responded to any of the comments or actions set by the EE.

During the inspection the school told the panel that there is no formal patient feedback process in place and if work were not safe it would not pass supervisor scrutiny, and that if no feedback was given this was taken as a good sign. Therefore, the panel considered this requirement to be partly met. The school should implement a formal process of obtaining patient feedback to inform programme development.

The panel considered that the EE reporting process was not robust and therefore consider this requirement to be partly met.



**Requirement 12: The provider must have effective systems in place to quality assure placements where students deliver treatment to ensure that patient care and student assessment across all locations meets these Standards. The quality assurance systems should include the regular collection of student and patient feedback relating to placements. (Requirement Not Met)**

As already highlighted in this report, the school do not conduct any audit to assess the suitability of the dental hospital setting. They do work closely with the supervising staff at the hospital; however they rely upon the memorandum of agreement, which is outdated now. Whilst the panel were assured that all supervisors are GDC registrants, the school does not check or ensure the quality of the environment in which the students are working. There should be checks to ensure that the laboratories the students are working in have the capacity and the equipment to fully support them.

### **Standard 3– Student assessment**

**Assessment must be reliable and valid. The choice of assessment method must be appropriate to demonstrate achievement of the GDC learning outcomes. Assessors must be fit to perform the assessment task.**

**Requirement 13: To award the qualification, providers must be assured that students have demonstrated attainment across the full range of learning outcomes, and that they are fit to practise at the level of a safe beginner. Evidence must be provided that demonstrates this assurance, which should be supported by a coherent approach to the principles of assessment referred to in these standards. (Requirement Partly Met)**

The school provided the panel with their blueprinting document which mapped their modules to the dental technicians' learning outcomes. During the inspection the school told the panel that they ensure that all learning outcomes are met and that all students' work is signed off as clinically presentable by a registered dental technician. Within their blueprinting document, all the learning outcomes were mapped, with the exception of "Demonstrate effective clinical decision making".

The panel also received a demonstration and access to the school's e-portfolio system during the inspection, where we were able to see evidence of students completing and uploading photos and videos of their work and the tutors marking and providing feedback. The students have a maximum of three attempts at any assessment, and if they fail three times they will be withdrawn from the course.

As not all of the GDC's learning outcomes are mapped, the panel consider this requirement to be partly met. The school should ensure that they map all the dental technician learning outcomes to the curriculum.

**Requirement 14: The provider must have in place management systems to plan, monitor and centrally record the assessment of students, including the monitoring of clinical and/or technical experience, throughout the programme against each of the learning outcomes. (Requirement Met)**

As well as the e-portfolio system mentioned above, the school make use of other online systems to set work, and for the students to upload their completed written assessments to. The students' marks are then integrated across all modules and assessments using an online system. This system allows the school to check and monitor the students on an ongoing basis.

Results are centrally recorded and presented at the examination board at the end of the academic year. The panel were assured that the school has appropriate systems in place.

**Requirement 15: Students must have exposure to an appropriate breadth of patients/procedures and should undertake each activity relating to patient care on sufficient occasions to enable them to develop the skills and the level of competency to achieve the relevant GDC learning outcomes. (Requirement Met)**

As mentioned in this report, the students conduct work on real patients in the final year of the course. Prior to this, students are exposed to a variety of simulated cases in the training laboratory on site. The school explained to the panel that the programme has been designed so that modules have both a breadth of prosthesis design variation, and a linear link through modules where complexity increases through the three years. The panel were assured that this requirement is met.

**Requirement 16: Providers must demonstrate that assessments are fit for purpose and deliver results which are valid and reliable. The methods of assessment used must be appropriate to the learning outcomes, in line with current and best practice and be routinely monitored, quality assured and developed. (Requirement Met)**

As mentioned above, the school is subject to a quinquennial review by the university, which ensures that the assessments are in line with the wider Cardiff School of Sport and Health Sciences and in line with best practice. There is also a separate modifications process that can facilitate changes in the intervening period. Any changes through this process are required to be approved by the programme committee, external examiner, and deputy dean.

The school also blind mark students' written assessments, with a second assessor counter marking for the top, bottom, middle (and borderline when applicable) assessments.

**Requirement 17: Assessment must utilise feedback collected from a variety of sources, which should include other members of the dental team, peers, patients and/or customers. (Requirement Partly Met)**

During the demonstration of the e-portfolio system, the panel could see that for each piece of work the student uploads, the mentors are able to provide feedback, as well as the course tutors. Some of the students have the opportunity to see their devices being fitted on patients in the dental hospital. This allows them to get instant feedback directly from the patient, however, not all students have the opportunity to see their own work fitted and may have to go in small groups or pairs to see another students' work fitted to a patient.

The school told the panel that there used to be a patient feedback mechanism when a previous staff member worked there, however once they left this process stopped. The school should formalise a patient feedback mechanism which feeds into the student assessment.

**Requirement 18: The provider must support students to improve their performance by providing regular feedback and by encouraging students to reflect on their practice. (Requirement Met)**

The online portfolio system has a section for the students to include their reflection with each piece of work they upload. The tutors also provide feedback to students after each piece of work. From meeting with the students, they told the panel they can be waiting several weeks sometimes to receive the feedback. The school have said they provide the written feedback in 20 working days, in line with the university policy.

The school has recently introduced a system where they provide students with a book, to note down all verbal feedback they get from the tutors during practical work. The school said they were consistently providing verbal feedback to the students, but it was often not recognised by them as feedback, so they introduced this system so the students can keep a log of this throughout the course.

Each student is provided with a personal tutor, who is there as a point of contact for students to reach out to if they are struggling with any aspect of their work. There is no formal process for these meetings and the panel would encourage the school to formalise a set number of meetings to establish engagement, progress and academic or pastoral needs between the personal tutors and their students throughout the year.

**Requirement 19: Examiners/assessors must have appropriate skills, experience and training to undertake the task of assessment, including appropriate general or specialist registration with a UK regulatory body. Examiners/ assessors should have received training in equality and diversity relevant for their role. (Requirement Met)**

Within the information provided to the panel prior to the inspection, we saw evidence of all school staff CVs, which showed they were all appropriately registered and undertook regular CPD and training. All teaching staff are also affiliated with the Higher Education Academy (HEA). The panel were assured that assessors have appropriate skills and experience needed to undertake their roles.

**Requirement 20: Providers must ask external examiners to report on the extent to which assessment processes are rigorous, set at the correct standard, ensure equity of treatment for students and have been fairly conducted. The responsibilities of the external examiners must be clearly documented. (Requirement Met)**

As highlighted above, the course benefits from an external examiner, who produces a report each year. The panel were provided with copies of reports from the last three academic years. The reports are comprehensive and covered a range of topics such as staffing, academic standards and assessment processes. The panel were satisfied this requirement is met.

**Requirement 21: Assessment must be fair and undertaken against clear criteria. The standard expected of students in each area to be assessed must be clear and students and staff involved in assessment must be aware of this standard. An appropriate standard setting process must be employed for summative assessments. (Requirement Met)**

During the inspection the panel were provided with evidence of students' practical work and the marking with each device. This demonstrated clear marking rubrics and schemes for grading of students' work.

From our discussion with the students, the panel were satisfied that the students were aware of the standard expected of them. The school run plenty of practical demonstrations before assessments, and these are recorded and uploaded online, so students can revisit them at any point.

## Summary of Action

Requirement number	Action	Observations & response from Provider	Due date
2	The school should work with the dental hospital to develop an appropriate patient consent form which includes direct reference to registrants and pre-registrants.	Use Cardiff Metropolitan Gumshield documentation and rework with colleagues from Dental Hospital	July 2024
3	The school must ensure that they conduct regular audits of the dental hospital, to ensure the safety and appropriateness of the environment and obtains copies of relevant documents.	Generate timetable for visits and include as scheduled agenda item on the weekly team Teams meetings. Notes to be kept.	Sept 2023
3	The university should update the memorandum of agreement between them and the health board in a timely manner.	MoU agreed and signed by both parties – Copy attached	Completed 16 <sup>th</sup> March
11	The school should formalise a patient feedback mechanism to inform programme development.	CMU will work with Dental Hospital in the development of a feedback process. (Programme design)	December 2023
13	The school must ensure that they map all the dental technician learning outcomes to the curriculum.	New mapping doc attached.	Completed 4 <sup>th</sup> April
17	The school should formalise a patient feedback mechanism which feeds into the student assessment.	CMU will work with Dental Hospital in the development of a feedback process. (Assessment)	December 2023

## Observations from the provider on content of report

Some comments in relation to Standards 10 (Response to PEP report) and 11 (Responses to EE report) have been addressed and documentation evidencing that is attached in response.

## Recommendations to the GDC

<b>Education associates' recommendation</b>	The BSc in Dental Technology continues to be approved for holders to apply for registration as a Dental Technician with the General Dental Council.
<b>Date of next regular monitoring exercise</b>	2023/24

# Annex 1

## Inspection purpose and process

1. As part of its duty to protect patients and promote high standards within the professions it regulates, the General Dental Council (GDC) quality assures the education and training of student dentists and dental care professionals (DCPs) at institutions whose qualifications enable the holder to apply for registration with the GDC. It also quality assures new qualifications where it is intended that the qualification will lead to registration. The aim of this quality assurance activity is to ensure that institutions produce a new registrant who has demonstrated, on graduation, that they have met the learning outcomes required for registration with the GDC. This ensures that students who obtain a qualification leading to registration are fit to practise at the level of a safe beginner.

2. Inspections are a key element of the GDC's quality assurance activity. They enable a recommendation to be made to the Council of the GDC regarding the 'sufficiency' of the programme for registration as a dentist and 'approval' of the programme for registration as a dental care professional. The GDC's powers are derived under Part II, Section 9 of the Dentists Act 1984 (as amended).

3. The GDC document 'Standards for Education' 2nd edition<sup>1</sup> is the framework used to evaluate qualifications. There are 21 Requirements in three distinct Standards, against which each qualification is assessed.

4. The education provider is requested to undertake a self-evaluation of the programme against the individual Requirements under the Standards for Education. This involves stating whether each Requirement is 'met', 'partly met' or 'not met' and to provide evidence in support of their evaluation. The inspection panel examines this evidence, may request further documentary evidence and gathers further evidence from discussions with staff and students. The panel will reach a decision on each Requirement, using the following descriptors:

A Requirement is met if:

"There is sufficient appropriate evidence derived from the inspection process. This evidence provides the education associates with broad confidence that the provider demonstrates the Requirement. Information gathered through meetings with staff and students is supportive of documentary evidence and the evidence is robust, consistent and not contradictory. There may be minor deficiencies in the evidence supplied but these are likely to be inconsequential."

A Requirement is partly met if:

"Evidence derived from the inspection process is either incomplete or lacks detail and, as such, fails to convince the inspection panel that the provider fully demonstrates the Requirement. Information gathered through meetings with staff and students may not fully support the evidence submitted or there may be contradictory information in the evidence provided. There is, however, some evidence of compliance and it is likely that either (a) the appropriate evidence can be supplied in a short time frame, or, (b) any deficiencies identified can be addressed and evidenced in the annual monitoring process."

A Requirement is not met if:

“The provider cannot provide evidence to demonstrate a Requirement or the evidence provided is not convincing. The information gathered at the inspection through meetings with staff and students does not support the evidence provided or the evidence is inconsistent and/or incompatible with other findings. The deficiencies identified are such as to give rise to serious concern and will require an immediate action plan from the provider. The consequences of not meeting a Requirement in terms of the overall sufficiency of a programme will depend upon the compliance of the provider across the range of Requirements and the possible implications for public protection”

5. Inspection reports highlight areas of strength and draw attention to areas requiring improvement and development, including actions that are required to be undertaken by the provider. Where an action is needed for a Requirement to be met, the term ‘must’ is used to describe the obligation on the provider to undertake this action. For these actions the education associates must stipulate a specific timescale by which the action must be completed or when an update on progress must be provided. In their observations on the content of the report, the provider should confirm the anticipated date by which these actions will be completed. Where an action would improve how a Requirement is met, the term ‘should’ is used and for these actions there will be no due date stipulated. Providers will be asked to report on the progress in addressing the required actions through the monitoring process. Serious concerns about a lack of progress may result in further inspections or other quality assurance activity.

6. The Education Quality Assurance team aims to send an initial draft of the inspection report to the provider within two months of the conclusion of the inspection. The provider of the qualification has the opportunity to provide factual corrections on the draft report. Following the production of the final report the provider is asked to submit observations on, or objections to, the report and the actions listed. Where the inspection panel have recommended that the programme is sufficient for registration, the Council of the GDC have delegated responsibility to the GDC Registrar to consider the recommendations of the panel. Should an inspection panel not be able to recommend ‘sufficiency’ or ‘approval’, the report and observations would be presented to the Council of the GDC for consideration.

7. The final version of the report and the provider’s observations are published on the GDC website.