

**REPORT OF THE GDC INSPECTORS ON THE
BTEC LEVEL 3 EXTENDED DIPLOMA IN DENTAL
TECHNOLOGY AWARDED BY EDEXCEL**

**BIRMINGHAM METROPOLITAN COLLEGE &
EDEXCEL**

23 FEBRUARY 2012

REPORT OF THE INSPECTORS

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OVERVIEW

This programme is delivered to a high standard, with effective communications, assessments and quality assurance infrastructure in place. The staff team is enthusiastic and committed to delivering and developing the programme. Student feedback was positive and highlighted the supportive learning environment and an enjoyment of practical activity. The College has excellent facilities to deliver the programme and there are clear academic progression paths offered to the students.

Records of student activity are clear and well-maintained and there is an efficient feedback system which is greatly appreciated by the students. The management team has a clear vision for the programme and understands and embraces the emerging technology within this discipline.

Work based placements are an issue for the programme. The students we spoke to found it difficult to gain placements without help from the College. The inspectors acknowledge the difficulty of the task, but believe that the College could explore new routes to obtain placements and not leave such an important opportunity to gain practical experience entirely in the hands of students. The College does not visit those work placements which do exist, nor do they organise training or calibration of the workplace mentors and so the student experience is unknown.

There are limited opportunities for students to work alongside other members of the dental team. We felt the College could investigate ways for students to learn alongside the dental nursing students who are training in the same building as the dental technology students.

Students are welcome to provide feedback to tutors on an informal basis and this means that there is no audit trail. We were informed that students are also welcome to attend course team meetings to provide feedback. We noted, however, that these meetings are currently during a time when students are excluded from College premises.

The inspectors found that this programme meets the GDC learning outcomes and recommend it be given “sufficiency.”

Introduction & background

1. As part of its duty to protect patients and promote high standards, the General Dental Council (GDC) monitors the education of student dentists and dental care professionals (DCPs) at institutions whose qualifications are approved by the GDC. The aim is to ensure that these institutions provide high-quality learning opportunities and experiences and that students who obtain a dental qualification are safe to practise.
2. The purpose of the inspection was to assess whether the BTEC Level 3 Extended Diploma in Dental Technology conforms to the GDC's requirements for the training of dental technicians and whether, on qualification, students would be acceptable for registration with the GDC.
3. This report sets out the findings of a one-day inspection to Birmingham Metropolitan College using the assessment principles and guidelines set out in *Developing the Dental Team – Second Edition (Interim) 2009* (DDT) as a benchmark. The report highlights many areas of good practice, but also draws attention to areas where issues relating to improvement and development need to be addressed. The report is based on the findings of the inspection and on a consideration of supporting documents prepared by the School.

4. The inspection took place on 23 February 2012. During the inspection, we met with academic staff of the School. We also met with tutors and staff responsible for quality assurance and management, as well students on the BTEC Level 3 Extended Diploma in Dental Technology.
5. The programme is awarded by Edexcel and is currently taught in four institutions across the United Kingdom – Birmingham Metropolitan College, Sheffield City College, Lambeth College, and the Belfast School of Dental Technology. The GDC treats each course provider separately and inspections will be undertaken at all institutions before allowing diplomates to register as dental technicians. The programme is delivered over two years to full time students and over three years to part-time students. Birmingham Metropolitan College has a maximum annual student intake of 45 full time and ten part-time students on this particular programme of study. Eight out of 40 full-time students and 10 out of 23 part-time students have left the programme since its inception.
6. The report(s) will be considered by the GDC Registrar. The School will be given the opportunity to correct any factual errors and then submit observations on the content of the report. The report, together with the School's observations, will then be published on the GDC website.
7. Students who pass the Extended Diploma can progress onto a Level 5 Foundation Degree awarded by Manchester Metropolitan University. The Foundation Degree is a GDC registerable award in its own right and allows students to extend their academic qualifications. The College anticipates that the BTEC Level 3 Extended Diploma in Dental Technology will act as an entry pathway to a BSc in Dental Technology awarded by Manchester Metropolitan University. This BSc programme is currently at the planning stage only. The students we spoke to were aware of the possibility of academic progression; however few expressed interest in continuing their studies: the programme was seen by many as vocational training and students said that they wished to gain the right qualification in order to start work.

Programme content and delivery

8. The programme commences with a two-day induction period which includes a component on Health and Safety. The first units cover basic skills and knowledge and then become increasingly more complex as the course progresses. The College provides three dental laboratories and a preparation room for 50 students per session. Additionally, there is a fully functional dental surgery used for simulation training and the tuition of dental radiography. No external laboratory locations are used.
9. This award may be taught at various accredited institutions across the United Kingdom. It is a 180-credit programme, consisting of 18 separate units of differing weighting and it is worth noting that academic staff at the College authored eight of these units at the invitation of Edexcel. The inspectors found that the College ensured all the GDC dental technology learning outcomes were adequately covered and assessed through its delivery of this programme. The College has very good clinical facilities and is equipped to teach digital radiography. The College is looking to make available to students computer-aided design and computer-aided manufacturing (CAD/CAM) technology and there exists great enthusiasm for the continuing development of computer-aided dental technology as well as an understanding of the impact this could have on the numbers of dental technicians.
10. The programme is delivered via a mix of didactic teaching, tutorials, workshops, laboratory practical sessions, virtual learning opportunities, work-based learning and

distance learning. In addition, units include student centred learning components to encourage the development of independent study skills, focused skill enhancement and personal review. As few students have managed to secure themselves work placements, the work-based learning aspect of the programme is often simulated within the College

11. Although the College delivers a dental nursing programme, there is no combined teaching and little evidence of the concept of dental team working being embedded throughout the course. The inspectors felt that the low numbers of students with work placements decreased the opportunity for dental team working and was an area of the course where improvement is needed. The College felt that dental team working was something that Edexcel should address by writing opportunities into the programme.
12. The College has systems in place for regular course review and has identified strengths and weaknesses. They have, quite rightly, identified progression into Higher Education programmes as strength. The College identified that the demographics of the tutors did not match that of the students and actively sought to address this by recruiting an ethnically diverse mix of male and female tutors. The academic team now has one full time and two part time members of staff who have graduated from a Foundation Degree in Dental Technology offered by the college. One further part time member of staff has also completed a National Diploma in Dental Technology at this college. We felt there is a real value to having newly qualified technicians on the teaching staff as they can strongly relate to the student experience and offer a unique perspective on the strengths and weaknesses of the course provision.
13. The student support mechanisms along with staff visits to work placements require formalising. There is currently no formal feedback to ensure consistency of teaching and comparable experience across locations. There is also no structured schedule for visits of placements by tutors, nor is there a system to monitor how a workplace mentor is progressing with a student.
14. It was of some concern to note that Edexcel does not review technical feedback on the practical content of the programme and its teaching. It was felt that this is a significant weakness in the programme as the internal monitoring and peer review system are not undertaken by a registered dental technician. The focus of the Edexcel verification is on teaching ability rather than the quality and suitability of technical content, which is of vital importance to a registerable qualification. It is a requirement that a further QA system is introduced that focuses on the technical content of the course and utilises an external, registered dental technician to scrutinise delivery of the programme.

Work placements

15. The final 10-credit unit of the programme is Work-based Learning in Dental Technology. The unit is designed to enable students to contribute to the development of transferable skills and should be carried out in a dental laboratory setting. The inspectors were assured by the College that students without work placements would be provided with live cases to work on in the College's laboratories. The unit requires students to maintain a logbook for the duration of a work-based dental technology practical project. Edexcel states that it is important learners have a suitably qualified and registered workplace mentor to coordinate with the academic coordinator in the planning, monitoring and collection of evidence for the unit; however, the College makes no formal contact with placement providers and the inspectors are concerned as to how the College monitors mentors for being suitably qualified.

16. Work placements are not compulsory. Students are encouraged to find a work placement for one day a week, but we were informed by the students we spoke to that they struggle to achieve this. Fewer than half of the students we spoke to had work placements. The inspectors were concerned as to how unit 18 (Work Based Learning in Dental Technology) could be completed without a work placement and were assured that, where necessary, live cases will be provided to students by the College. The inspectors were satisfied that the College will produce competent dental technology beginners via this programme; however they note that students with work placements could be more advanced than those without.
17. In those instances where students have found work placements, there are no visits made by College staff, nor are trainers invited to visit the College for training or calibration. The College perceives there to be lack of interest in education by work placement trainers. The inspectors were disappointed by the lack of resources devoted to securing and monitoring work placements as they can provide invaluable experience and training for students. With the reduction of the length of the course from three years to two years, it is vital that students are provided with as wide a range of technical experience as possible. For those students in work-based placements, the College should develop measures to make sure students are not simply left performing more menial laboratory tasks and are offered a rounded learning experience while outside of the College setting.

Staff issues

18. The College employs working dental technicians as associate lecturers on a part-time basis. Initially, there was some turnover in staff numbers, but the team is now stable. The staff members we spoke to were enthusiastic about the programme and the students. They are committed to providing regular feedback and encouragement to the students regarding their performance. Staff act as tutors, but do not have a formal system of tutor meetings as the programme manager stated that he prefers an informal approach to dealing with student issues and concerns.
19. There are three tutor groups per year and they meet for an hour a week and these can be used for group work, small group and one-to-one tutorials. There are regular course team meetings where staff may bring up issues regarding the programme and can provide input into the management and change of the programme. Course team meetings are used for staff to monitor the performance of each cohort and, if necessary, individual students. The minutes are supplied to the senior management of the directorate who use the information to add to strategic annual reports.

Student issues

20. The students we spoke to informed us that the only experience they had of dental team working was during work placements or in the College laboratory. Although dental nurses are trained by the College, they are on a different floor and students only meet socially, if at all. Students are invited to provide feedback on the programme at student forums and course team meetings. We were informed that students are welcome to attend course team meetings in person, but these are held on Wednesday afternoons – a time when students are not permitted in the College.
21. The students stated that they enjoyed the programme, particularly the practical aspects. They find their written assignments challenging and feel that they would benefit from having more resources available. The students were unhappy with the number of non-reference library books specific to dental technology and would also like to be given more hand-outs and have slide notes on the College's virtual learning environment. All

students are given individual learning plans (ILPs) and students believed that these provided them with direction. ILPs are looked at during the weekly tutorial sessions and the students we spoke to said that the tutors are very helpful and supportive.

22. All of the students we spoke to have found that laboratory work placements are very hard to find and they would appreciate more help from the College in finding them. They are happy with the amount of practical time provided by the College, but would like more commercial laboratory time and would also like employers to be invited into the College to speak to them.
23. Professionalism, fitness to practise and the roles and responsibilities of the dental team is covered in a 10-credit unit. Students were aware of the standards that will be expected of them as a member of a registered profession.

Assessment

24. The assessment process is comparable with other BTEC courses, incorporating assignments and practical work including:
 - Written evidence and research studies in the form of assignments
 - Oral presentations
 - Discussions
 - Direct observations
 - Work-based assessment

The programme does not assess students using examinations: course leaders have applied to Edexcel's method of assessment, which is continuous and allows feedback and the opportunity to improve. Each unit has a set number of assessments, most of which are written, although there are also practical assessments where appropriate.

25. Every assessment may be submitted on two occasions: the submission and resubmission deadlines for every assessment are given to students at the beginning of the academic year in the form of a workstream. Feedback is provided to students after the initial submissions and students have the opportunity to improve their work and resubmit it. Resubmission grades are capped to one level above original grade. Students will pass this programme if they complete all written and practical assessments to a satisfactory standard. The inspectors were satisfied that the programme is assessed in such a way that students are 'at risk' of being tested on any of the GDC's learning outcomes.
26. The workstream showed that assessment is mostly by written reports, although there are also a good number of practical assessments across the 18 units. The students we spoke to informed us that the assessment process is on-going and takes up a lot of their spare time. They understand that this is necessary in order to achieve good assessment grades. Some of the students we spoke to admitted that they did not take the opportunity to improve and resubmit assessments as this was too time-consuming and they would be happy to simply pass the programme and be qualified to work as dental technicians.
27. As in all BTEC National programmes, all units are internally assessed and criterion referenced, based on the achievement of specified learning outcomes. Achievement can

be at three levels - pass, merit or distinction. Practical assessment is marked according to how much help is needed from the tutor. The marking criteria supplied by Edexcel are extremely clear and very specific. The marking criteria for every unit are provided in the student handbook.

28. All assessment is internally verified at four meetings per year. These meetings allow for assessor training, monitoring and sampling of candidate and assessor evidence and evaluation of assessment practice. The programme is then externally verified by an External Verifier appointed by Edexcel. This process monitors and verifies the assessment practices of the course programme team and the work of the candidates.
29. Arrangements for appeals follow Edexcel's procedures. Where a student wishes to appeal against the assessment decision of his or her assessors, he or she should make a request to the internal verifier. A second decision will be made by another member of the programme team and will involve the candidate. If the decision remains unsatisfactory to the candidate, the external verifier will be approached to make a final decision concerning the appeal.
30. The College has a stringent quality assurance process to ensure that quality is maintained across the programme with the one exception of the work-based placement mentioned at paragraph 13. There are regular quality meetings and the programme director has a monthly task list to complete. No external examiners are used by the College as it uses Edexcel's Online Support for Centre Assessors (OSCA) process. This means that an Edexcel accredited Lead Assessor external to the programme scrutinises the internal verification processes and produces a written report.
31. There is no final exam board for this programme. Following successful verification, candidate names are forwarded to Edexcel for the certification of the BTEC Extended Diploma in Dental Technology.

Conclusion

32. We were satisfied that the curriculum is being delivered as proposed in the original submission to the GDC and that it conforms to the GDC's principles and guidance as published in DDT.
33. We recommend that this programme be granted 'sufficiency'.

Requirements

To the school

- Increase the opportunities for dental team working amongst College students. (11)
- Organise calibration sessions for work placement mentors (13, 15, 16, 17)
- Investigate ways in which students can be assisted in gaining work placements (16, 17, 22)
- Hold course team meetings at a time when students are able to attend (20)
- Continue to improve library facilities specific to dental technology (21)

To Edexcel

- Introduce a verification system that focuses on the practical content of the course and utilises an external, registered dental technician to scrutinise delivery of the programme. (14)

To the GDC

- To monitor and follow-up actions taken by the College in response to the requirements

[NUMBERS IN BRACKETS REFER TO INDIVIDUAL PARAGRAPHS WITHIN THE MAIN BODY OF THE REPORT]

Birmingham Metropolitan College observations on General Dental Council Report 2012

This document will respond to the points recorded in the report using numerical reference.

11. Dental team collaboration is an area the academic staff recognises as needing developments to drive improvement. Whilst an increased level of work placements would encourage team working within the laboratory environment the integration with other team members may not improve as few laboratory staff interact with the clinical dental team members.

Cross teaching of dental nurses has been explored during the past twelve months allowing more nurses to experience the manufacturing processes undertaken in a dental laboratory.

The main issue with cross teaching is the different approaches of the awarding bodies, in this case Edexcel and City & Guilds. Timetabling and physical resources also prove troublesome when organising teaching.

12. Diversity of staff is varied considering our part time colleagues and the department is actively sourcing staff from different backgrounds to improve the learner experience.

14. The department encourage the comments in this section as a method of improving technical ability. This would set a precedent for Edexcel programmes but this will be investigated.

17. College staff are aware of the difficulties of student progression when developing in their work placements. The individual's role in this environment is determined by the employer and the demands of practice. As an education provider we can only provide guidance in the improvement of technical ability but this has little impact on many employers. We are encouraged that the inspectors highlighted this issue and would ask for future assistance from the governing body to try to improve this situation.

20. Re-visit point 11.

21. The cost of books with a dental theme are considerably more expensive and are usually placed by the library team in reference section. The college has an active plan in increasing publications to learners and is exploring eLearning methods to improve access.

There are no further comments from the academic team at Birmingham Metropolitan College and we are satisfied that the detail in the report is a fair record of the inspection.

