

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

LAMBETH COLLEGE & EDEXCEL

20TH APRIL 2012

REPORT OF THE INSPECTORS

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OVERVIEW

Lambeth College delivers this programme to an excellent standard, with effective communications, assessments and quality assurance infrastructure in place. There is a dedicated and enthusiastic team of staff that has a clear vision for the course, incorporating the latest technical and digital developments and a wider understanding of modern Dental Technology as an evolving profession. The College has excellent facilities to deliver the programme. The use of a Laboratory Manager to oversee and maintain laboratory facilities has been of great benefit with equipment and materials obtained at discounted prices, and cutting-edge technology leased on attractive terms.

Student feedback was positive and showed an awareness of the responsibilities expected of individuals going into a registered profession. We were informed by samples of students from both years that the course is challenging but well delivered, with clear academic progress paths and pastoral support. Tutors provide regular verbal and written feedback on assignments and all individuals have been successful in finding a work-based placement. Students felt they had a voice within the College with the Centre Representative meetings, a mechanism that offers student group representatives the chance to feedback issues. This proactive approach to seeking input from students groups is highly commendable.

The extended diploma is a large diet for a two-year programme, which puts a strain on tutors and students. The number of students enrolled on the programme is also high and a concern for us was the current low staff to student ratio of 18-20 students to one tutor. We felt that tutors may struggle to maintain standards and laboratory technicians are needed to assist in the supervision of students. The College expectation of 20 students to one member of teaching staff is not feasible for an extended diploma in such a practical discipline as dental technology.

The Dental Work Based Learning (WBL) Coordinator is given 144 hours per academic year to manage the student's placements. Training sessions for mentors are run twice a year and all laboratories that take on students receive a visit once a year. The visitation can be done by the WBL coordinator or another member of staff, depending on the location of the lab. We have been assured that student work practice is continuously monitored to ensure that the students are provided with an adequate range of industrial experience.

We commend the positive approach the College has taken to seeking employer engagement with the holding of an employer forum event. We were also encouraged to hear the College had held CPD training events to generate extra revenue. We felt there is an opportunity to combine the two areas and offer core CPD as an incentive for laboratory owners to give up their time to provide valuable input into the curriculum and programme delivery.

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 Lambeth 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 examples of excellent practice but also highlights some areas where we felt improvements could be made. The report is based on the findings of the inspection along with consideration of supporting documents prepared by the College.
4. The inspection took place on 20th April 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. At Lambeth College, the current full-time intake is 39 students for year one and 31 students in year two. Current part-time intake is 40 students for year one and 37 for year two. The predicted intake for September 2012 is 40 full-time students and 40 part-time students. The College will be expanding their intake to 54 full time and 54 part time students to meet the demand of the local and regional employers for the course.
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 be published on the GDC website.

Programme content and delivery

7. The College facilities are spacious and equipped with modern equipment and materials. There are three laboratories and three lecture centres, including a new state of the art room that was sponsored by *Chaperlin & Jacobs Ltd*, a leading supply and service provider to dental laboratories. Students told us the College has very good IT and library services. External laboratory facilities are used for all the students. Part time students use their place of employment and full time students undertake mandatory work experience placements in commercial dental laboratories
8. 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. We found that the College ensured all the GDC dental technology learning outcomes were adequately covered and assessed through delivery of the programme. The 18-module course content is large for a two-year programme but benefits from a strong amount of practical experience that the College has built into its provision. The College has developed excellent industry

links with full advantage being taken of the London location to establish strong professional ties. In addition to the sponsorship of a lecture room, laboratory equipment has been loaned or bought at discounted prices from suppliers, sometimes using contact with former students. This innovative approach is commended.

9. At enrolment, students are organised into separately timetabled groups and allocated a course tutor who is responsible for their academic and pastoral support. Early units of the programme cover basic skills and knowledge and then become increasingly more complex as the course progresses.
10. The course materials are designed by the tutors in accordance with Edexcel guidance for unit content and learning outcomes. Units are taught through a combination of lectures, seminars, and practical assessment. In addition, units include student centred learning components to encourage the development of independent study skills, focused skill enhancement and personal review. We were encouraged to note that all students were able to find work placements and appreciate this was greatly assisted by the strong professional relationships maintained by the College.
11. Students on the full time course are supported with an online Individual Learning Plan (ILP). This tailored learning plan tracks progress and forms the basis for monitoring student performance. The ILP is informed by teaching staff liaising with the course tutor to set targets based on academic performance during timetabled 1:1 tutorial sessions. ILPs are reviewed and academic targets monitored once a term.
12. The College does not deliver any other dental programme so there is no combined teaching and little evidence of the concept of dental team working being embedded throughout the course. The tutors were highly aware of the somewhat detached nature of Dental Technicians and have made attempts to expose students to the wider dental team. Some students visit practices and guest speakers are invited to give talks, however it appeared student interaction with other members of the profession is largely dependent on the environment at an employer or on a work placement.
13. The College is aware of the dental team's prominence in the new Learning Outcomes of *Preparing for Practice*. There was acknowledgement of an opportunity with the establishment of the new Learning Outcomes to seek stronger links with students studying in other areas of the profession in and around London. We also felt there was more opportunity to develop and expand the use of visiting lecturers from other areas of the dental profession.
14. The College has a quality cycle that is undertaken annually. It uses course reviews and quality improvement plans to monitor delivery and student performance. There are regular team meetings to raise issues affecting performance and delivery, and a course board meeting is held at the end of academic year. This is where decisions are made for revisions or changes to assessments, exams, and practical work. All revisions and changes are subject to internal verification before the start of a new term.
15. We were informed that delivery of the 18-unit content will be reviewed and reduced slightly at the end of the year. Though we observed a motivated and well organised team of teaching staff, a concern was that tutors may struggle to maintain standards at the current low staff-to-students' ratio of 18-20 students to

one tutor. We felt this was on the cusp of what is manageable and safe, and relies on laboratory technicians to assist in the supervision of students. The College expectation of 20 students to one member of teaching staff is not feasible for an extended diploma in such a practical discipline as dental technology. This issue requires careful monitoring to ensure that the staff-to-student ratio does not impact on the quality of the course provision and teaching experience.

16. 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 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

17. 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 unit requires students to maintain a logbook for the duration of a work-based, dental technology practical project. Logbooks are assessed by tutors at the end of the course.
18. Full-time students are expected to find work experience placements at a commercial laboratory as work experience is not delivered in the college. Students are informed at the onset of the course that they should ideally be in work placements for one day a week in the first year and two days a week in the second year.
19. Students are encouraged to find their work placements in the first term. They speak to laboratories in the local areas and make use of the strong reputation that Lambeth College has built up in the profession. If individuals are struggling to find a placement, there is Dental Work Based Learning Coordinator on the teaching staff who will use industry contracts to assist the student in finding an opening.
20. Students are assigned a work-based mentor at their placement. Mentors are required to formally record the student's development towards competent practice. They liaise with the College faculty and sign-off sections of a logbook as a student progresses their skills. Mentor training is offered twice a year, attracting 2 hours of CPD for the participants. If a mentor is unable to attend the training days, a visit from the WBL coordinator will be arranged and the training provided at the work place.
21. The Dental Work Based Learning Coordinator is given 144 hours per academic year to manage the student's placements. They maintain contact with laboratories to monitor the experience the student is having, mainly by telephone but with some visits shared among the staff. Students are encouraged to raise any issues with their course tutors as a first point of contact. Tutors assess completed logbooks at the end of the programme. 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. We have been assured that student work practice is continuously monitored to ensure that the students are provided with an adequate range of industrial experience and annual visitations are made to all laboratory placements.

22. The College has been proactive in its attempts to engage employers with the programme. A laboratory owners' forum was trialled but did not get a huge response with only four out of twenty-five invitees attending. The logistical difficulties in organising such an event are recognised and the proactive approach encouraged. The College noted that discussion of curriculum could be offered as core CPD, which would add an incentive for employers to give-up their time. We were informed feedback is more likely to come from a questionnaire that is sent out annually.

Staff issues

23. Students benefit from a dedicated team of tutors that remains active in the profession. We felt the tutors did an excellent job in keeping pace with the high demands placed on their time, with a clear focus on preparing the students for the pressures of laboratory work that is fast paced and deadline orientated. The team are committed to providing regular feedback and encouragement to the students regarding their performance.
24. Seven out of the eight lecturers for the course have teaching qualifications with the eighth individual currently training on the in-service initial teacher training programme (DTLLS). A senior member of staff has been appointed as a BTEC Programme Coordinator. They are given 2 hours weekly remission from teaching duties, which we felt might not be enough to fulfil such a large administrative undertaking. We were pleased to see two members of staff on the team are recent graduates from the Foundation Degree programme at the 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.
25. The College has a Laboratory Manager that covers all science programmes, including Dental Technology. This member of staff maintains facilities, keeps equipment up-to-date and manages the College laboratory budget. On behalf of the College, they have actively sought ties with the local industry for the benefit of the staff and students. A CPD course was organised with *Merz Dental*, a German company that specialise in products for dentists and dental technicians, and there is a plan to introduce training on a *Straumann* scanner to the course content. We were told there was a good budget for staff CPD and the College is actively incorporating new technologies into both the training of its dental faculty and the delivery of the extended diploma. The *Merz* course is a twice a year event and has provided employers/working dental technicians with valuable CPD hours.

Student issues

26. The students we met were very positive but told us they found the course challenging, particularly the process of finding a work placement. Despite being informed of a range of difficulties encountered in finding an opening at a laboratory, every member of the two groups we saw had successfully found a work-based placement.

27. The students reported no issues regarding assessment and feedback. Work is marked quickly under clear guidance with deadlines designed to mimic real life laboratory timeframes. We were told the team of tutors is approachable and provide both verbal and written feedback. There is one tutor for each specific assignment, which means there is no doubt about the point of contact for queries or further guidance.
28. We commend the Centre Representative meetings, a mechanism for students to provide formal feedback to the College. Each student group is asked to elect a student Course Representative to attend the meetings. They then represent their peers at termly Centre Representative meetings with the Faculty Head, Head of Student Performance and curriculum managers in attendance to respond to issues raised by the students as a collective.
29. 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

30. 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
 - Written examinations in the form of “Phase Tests” are also undertaken in most units.

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. All the practical work is examined and must reach at least pass level.

31. As in all BTEC National programmes, all units are internally assessed and criterion reference, 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. The College adopts a double assessment of grades along with double-marking within the tutor team.
32. There are several mechanisms of quality assurance. In addition to the College’s quality assurance cycle, the staff team holds regular minuted team meetings with

actions taken for 'at risk' students and other issues affecting performance and delivery. The design of assignment briefs and final assessment of learners' work is internally verified as part of Edexcel's quality assurance procedures. An internal verification schedule is drawn up, covering every student, unit, every assignment, and every assessor, with proposed dates. The process is overseen by the College's Lead Internal Verifier.

33. 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.
34. 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

35. 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.
36. We recommend that this programme be granted 'sufficiency'.

Requirements

To the school

- Increase the opportunities for dental team working amongst College students. (12, 13)
- Continue to develop and expand the use of visiting lecturers from other areas of the dental profession. (12, 13)

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. (16)

To the GDC

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

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

Observations from Lambeth

- **Overview (paragraph three)**

All teaching staff including laboratory technicians are qualified dental technicians. Most of the tutors are registered with the GDC. One of our technicians is also a qualified teacher.

Our laboratory technician are employed as “technical demonstrators” and also ensure health & safety practice.

The College does keep the staff/student ratios under review to insure the continuous high quality delivery of the programme and that students practical work is maintained at “good clinically acceptable standards” as judged by the internal and external quality review systems – the moderation process. Moreover, students who have been identified as needing additional practical time do receive additional classes in which they can get additional support and improve the standard of their work.

- **Paragraph 15**

From 2012-13: groups sizes have been reduced to 18 per group, and a qualified registered laboratory technician will be in attendance to assist the lecturer where necessary. Most staff have been teaching for many years and are able to manage the group sizes. It has to be remembered that the courses have to be financially viable in order for the college to run them.

The high quality of student work has been maintained (as samples seen by the inspection team) as all work on the course has to be “clinically acceptable” in order to pass as designated by the course programme.

- **Paragraph 16**

As noted earlier all staff at Lambeth College are qualified dental technicians and have significant industrial experience in the production of clinically acceptable appliances and have experience in making professional judgements.

Most the tutors are registered with the GDC, so are therefore able to judge the clinical acceptability of an appliance.

“Significant weakness” - Some members of the team felt that this term may reflect poorly on the course.

“Teaching ability” - The role of EDEXCEL is to: Check that centres are operating quality assurance & assessing to the right standards; to provide a review of assessment & verification against national standards over time; to ensure that there is an accredited Lead Internal Verifier in place; and that the correct format, documentation and processes are being used by the College.

The “focus” of EDEXCEL is to check that the work has been rigorously Internally Verified; that all due processes of assessment have taken place; that the curriculum has been adhered to and that the students have met the

grading criteria. EDEXCEL does not assess the teaching ability of the staff this aspect is formally assessed annually by the College Senior Management Team and is regularly monitored during OFSTED inspections.

- **Paragraph 24**

The BTEC Programme Coordinator will be given 4 hours weekly remission from teaching duties from September 2012.

- **Paragraph 30**

In the practical units, all the practical work is examined and must reach at least pass level. The course content will show that there is a large volume of practical work.