



Licensed to practice

Elma P. Douglas* describes the rise of formal dental teaching in Glasgow

The passing of the Dental Act in 1878 regulated the qualifications of dentists. It formally recognised them as part of the medical profession and subjected them to a similar kind of national regulation. It was designed to ensure that everybody entering the profession after August 1879 should possess a diploma or licence to practice from one of the licensing bodies.

This Act allowed the Faculty of Physicians and Surgeons of Glasgow and the Royal Colleges of Surgeons of Edinburgh and Ireland to provide their own separate licentiateships in dental surgery and higher dental diploma. Prior to this the Royal College of Surgeons of England was the only institution granting a diploma in dental surgery.

In January 1879, the Glasgow Faculty elected a Dental Board to examine in dental surgery and the first four licences in dental surgery were granted in April 1879. Dentists in practice before the Act, who were entitled to register as dentists, were admitted to the examination *sine curricula*. Those not so entitled were required to produce certificates of attendance at lectures and hospital practice before they could sit the examination. In the first years, especially, this led to many students attending only certain classes in order to qualify for the examination.

The qualifying regulations of the Faculty, in 1880, required that the candidate should have been engaged for not less than four years in acquiring professional knowledge. The general requirements should include at least three years acquiring practical knowledge under a practitioner registered under the Dental Act. The general curriculum included anatomy, dissection, physics, chemistry, practical chemistry with metallurgy, surgery, medicine, materia medica. The length or number of lectures for each course was specified. The student had to attend a recognised general hospital with clinical instruction for a minimum of one year. The specific dental requirements included courses in dental anatomy and physiology – human and comparative, dental surgery, metallurgy, and mechanical dentistry. The student had to attend a recognised dental hospital for two years.

It is interesting to compare these regulations with those of 1918. The dental student had to be registered as such with the General Medical Council, which itself required candidates to have passed preliminary examinations in English Language, Latin, mathematics and a foreign language. The dental course lasted four years. The general subjects to be undertaken at a recognised medical school included chemistry, physics, human anatomy, dissection, physiology, practical physiology, surgery and surgical pathology, medicine and general pathology, and clinical medicine and surgery at a recognised general hospital. The special subjects to be undertaken at a recognised dental school were dental anatomy and physiology – human and comparative, dental histology, dental surgery and pathology, dental materia medica, dental metallurgy, dental bacteriology, and dental mechanics. All courses, both general and specific, had a specified period of attendance or number of lectures. The student was also required to attend for two years at a recognised dental hospital or dental department of a general hospital and to have received practical instruction in administration

of anaesthetics with special reference to their use in dental surgery. He also required to have had two years practical instruction in mechanical dentistry in the workroom of a registered dentist, or in the mechanical department of a recognised dental school or hospital, under the supervision of a qualified dentist.

There were two professional examinations. The first examination subjects were chemistry and physics, dental metallurgy and dental mechanics, human anatomy and physiology. These subjects could be taken separately or together. A minimum of the three months had to elapse between this examination and the taking of the final examination. Subjects for this examination included principles of surgery, medicine with dentally orientated materia medica and therapeutics, dental anatomy and physiology, dental pathology, bacteriology and surgery, and practical dental surgery in the dental hospital. The earliest age at which a student was admitted to the licentiate was 21. If a candidate was already qualified under the Medical Acts, he could be examined in the dental subjects only.

The above statement brings to the attention the fact that a number of dentists also had medical qualifications. In 1884, the Faculty of Physicians and Surgeons of Glasgow, the Royal College of Surgeons of Edinburgh and the Royal College of Physicians of Edinburgh introduced the Triple Medical Qualification, which allowed medical students to qualify as doctors outwith a university course. A number of dentists took this qualification in addition to their dental diploma. There is little doubt that a number of medical students would, also, have taken the dental qualification in addition to their medical one. The medical students who took the Faculty qualification were often those who could not afford the financial burden of the university course or were destined to work in the missionary field. Both groups would be working in areas where an additional dental qualification would be a blessing..

It is interesting to note that the Governors of the Dental School, when formatting the advertisement for a new dean, in 1945, wanted a candidate who also had the Triple Qualification. Only the refusal of the *Medical Journal* to carry the advertisement resulted in its withdrawal.

In Glasgow, the Educational Institute of Scotland conducted a qualifying preliminary examination for GMC registration. The Faculty set the regulations and conducted the examinations but the general qualifications required had to be gained at a medical school and the dental ones at a dental school. Of the four extramural medical schools in Glasgow, only two, the Anderson College and the smaller St. Mungo's Medical School, were involved in dental teaching.

As will be seen later, Anderson College decided, in 1879, that the medical faculty there should diversify into the academic and practical study of dentistry. This resulted in the foundation of the Dental School and Hospital and three new lectureships in dental surgery and pathology, dental mechanics and metallurgy and dental anatomy and physiology. Of the 13 classes required by the Faculty for the licentiate, nine were already provided and another was available at the Glasgow Royal Infirmary. However, like their medical counterparts, the dental students would probably choose to take their general subjects wherever the best courses were given. It was, therefore, common at that time for students to have class tickets from the different medical schools and not to follow the whole course through at one school only.

When Anderson College amalgamated with the College of Science and Arts to form the Glasgow and West of Scotland Medical School, in 1886, both the medical and dental faculties became independent schools. The independent Anderson College Medical School was sited in Dumbarton Road next to the Western Infirmary. Although no longer dealing with the dental part of the curriculum, dental students would still attend for the general medical subjects. Anderson College appears to have sought to resume the teaching of dental subjects, when, in 1913, the lecturer in dental anatomy and physiology at the Dental School took up a similar post at Anderson College.

Glasgow Royal Infirmary Medical School was formed in 1876 and, in 1882, moved into a purpose-built building in the grounds of the Royal Infirmary. The school became the St. Mungo Medical College in 1889. This gave it larger scope, facilities and lectureships. Although, it was never involved in the specific dental subjects as was Anderson College, there seems little doubt that it would have been involved in the teaching of the general subjects, especially in view of the close relationship between the Anderson Medical Faculty and the Royal Infirmary, at that time. Dental students were definitely at the College in 1904, when they were complaining that they were unable to take the four subjects – chemistry, anatomy, physics and physiology – in the same winter session. In 1931, the Registrar of the Dental Board recognised St Mungo's College as a suitable school for instruction in the general subjects of the dental curriculum and permitted their students in receipt of bursaries to take courses at the College.

In 1947, both the Anderson and St. Mungo Medical Schools were absorbed into the University of Glasgow.

The history of the Glasgow Dental Hospital and School is completely covered by T. Brown Henderson's excellent book but, in order to complete the story of student dental education prior to 1947, I have presumed to mention some of the points concerned with teaching at the School.

The Glasgow Dental School opened on the top floor of Anderson College in George Street on June 3, 1879, pre-empting the Edinburgh School by a few months. Classes in dental anatomy and physiology, dental surgery and pathology were held in the summer term and mechanical dentistry in the winter term. The Dental Hospital and School moved from Anderson College to new premises in George Square as an independent institution in 1885. This would be the first of six moves to different sites around the city. Each move was dictated by the need for more space. While each move started on a high with improved or vastly improved premises, it seemed to end too often in deterioration and inadequacy, before a further move was undertaken, partly due to poor planning and partly to finance. In its first new site, the claims of the school suffered because of the drain of the hospital on funds. However, the school and hospital gained in prestige and popularity. The teaching programme was reviewed to allow students to take the examinations of any of the licensing bodies. A course in dental metallurgy was added.

Irregular dental practices still flourished in the city causing the students, in 1887, to petition the West of Scotland branch of the British Dental Association for protection against them. In 1890, the hospital gained its first rudimentary laboratory. In 1896, there were still no tutorial classes in operative procedures, requiring new students to serve an apprenticeship in their first month. By 1900 the number of students enrolled was 26, the largest so far. A

lectureship in dental pathology and bacteriology was established in 1907. At the same time a tutor was appointed to provide daily clinical instruction in operative technique to junior students.

By 1908 the hospital had fallen behind similar teaching centres in England. Clinical teaching to this point had been somewhat haphazard. Also, as they had done in the beginning, many students, already in practice, were enrolling in the hospital solely to learn the rudiments of operative techniques with no intention of finishing the course or sitting the diploma examinations. They had a poor knowledge of anatomy and physiology. Therefore, all students enrolling were required to abstain from all form of private practice while attending the school. In 1910, entrance to the hospital was restricted to those students who could produce evidence that they had passed the first professional examination in chemistry, physics, anatomy and physiology. Term examinations were introduced and the whole scheme of teaching was systemised and the standard greatly raised. Lecturers were appointed in dental bacteriology, general anaesthetics and orthodontia. In 1914, the School was administered by a separate committee from that of the Hospital. The following year, it gained its much needed teaching laboratory and instituted four new lectureships in operative dental surgery, practical dental histology, orthodontia and crown and bridge work. A course of lectures in general anaesthetics was also included.

After the war there was a great influx of students. There were now 10 lectureships, namely, in operative technique, dental surgery and pathology, operative dental surgery, dental anatomy and physiology, dental mechanics, dental metallurgy, dental bacteriology, anaesthetics, practical dental histology, orthodontics, crown and bridge work. Radiography was added in 1923.

In 1921, state registration of dentists was introduced. 1923 saw new regulations from the General Medical Council, governing the dental curriculum, come into force. One of these requirements was that the student should have received practical instruction in dental mechanics for a minimum of two years or 2000 hours and this should have been taken at a recognised dental hospital or school. If any part of the instruction was taken with a registered dentist, the required time spent there would require to be at least twice the time taken for the corresponding instruction at a dental school. This led to major changes in the method of instruction of the juniors who had hitherto learned the craft under the personal tuition and in the workshop of a private practitioner. The Glasgow School was years behind in providing facilities for training in dental mechanics. A laboratory and a tutor in practical dental mechanics had to be rapidly provided.

The year 1924 saw an adverse inspection by the Dental Board of the U.K. of the School and Hospital. Such was their dissatisfaction that the governors were asked to consider amalgamating with either the Anderson or St. Mungo School. Matters were allowed to drift. A further inspection, in 1925, by the educational grant committee of the Dental Board of the U.K. resulted in the committee preventing their bursary students attending the Glasgow School for anything except training in practical dental mechanics. These students were diverted to Edinburgh. The new Dental Hospital and School was not opened until the end of 1931. The finances of the hospital and school were separated in 1935 and a dean appointed. A teacher of clinical dental surgery and director of studies was funded. The year 1937 produced a lecturer and demonstrator in dental prosthetics and dental mechanics and new tutors in operative dental surgery.

From the late 1930s the Dental Board wanted an alliance between the School and the University. Interdepartmental talks took place in 1944 between the universities and dental schools. The Teviot Committee Report of 1946 recommended that the Dental School should be included in the University. The University took over responsibility for dental education in the city and students entering on a course of study in October 1947 were enrolled for the degree course of Bachelor of Dental Surgery and Master of Dental Surgery. The Dental Hospital was transferred to the State in July 1948 in accordance with the National Health Service (Scotland) Act of 1947.

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