SECTION ONE

Historical Chronology of the Dublin Institute of Technology
CHAPTER 1

Technical Education in Ireland before 1922

This chapter gives an outline of the developments of the technical/vocational education system in the Dublin area from which the Dublin Institute of Technology (DIT) emerged.

EARLY TECHNICAL/VOCATIONAL EDUCATION

There was little coherent technical/vocational education in Ireland before the end of the 19th century. The Dublin Metropolitan School of Art had been established by the Royal Dublin Society in 1749. In 1849 a school of design had been set up in the premises of the Royal Cork Institution. Then in 1855 a school of art was set up in the premises of the Athenaeum Society of Limerick. Mechanics Institutes for the training of artisans were founded in a number of areas beginning in Dublin in 1837 and including one in Clonmel, Co. Tipperary which was established with the support of Thomas Bianconi in 1845.

After 1859, students in Ireland studied for examinations provided in science and art subjects by the Kensington Science and Art Department in London and teachers received payment-by-results. After the founding of the Royal College of Science in 1867 pressure developed in Ireland for a separate Irish science and art department to better serve industrial development in Ireland. The establishment of the City and Guilds of London Institute in 1880 provided examinations and payment-by-results for teachers, in more technical areas than the older science and art department scheme.

ORIGINS OF THE DUBLIN INSTITUTE OF TECHNOLOGY

The origins of Dublin Institute of Technology can be traced to the Irish Artisans' Exhibition, which was held in 1885 in premises located on the site of the present National Concert Hall in Earlsfort Terrace. The exhibition

1. Gleeson, M. M., Development of Technical Education in Dublin, (Dublin: Associa-
tion was organised through the Workingmen’s Club in Christchurch Place and was supported by a representative range of artisan delegates from the bookbinders, bricklayers, carpenters and joiners, cooperers, cork-cutters, goldsmiths and jewellers, horseshoers, letterpress printers, plasterers, silk-weavers and stonecutters. The purpose of the exhibition was to encourage industry, “not in the form of capital but in the form of handicrafts . . . to produce home industry” and to “encourage technical education”.

This latter purpose had been given added impetus by the report of the Samuelson Commission on Technical Education, which had sat from 1881 to 1884 and which recommended that municipally aided technical schools, on the successful continental model, be established throughout the United Kingdom.

Technical school, Kevin Street

At the conclusion of the artisans’ exhibition, it was suggested that the premises on Earlsfort Terrace might continue to be used to provide education for the working classes of the city. A broadly based committee was established to advance the proposal, with Michael Davitt as one of its principal champions on Dublin Corporation, and Arnold Graves as the main promoter. After extensive deliberations it decided that more suitable accommodation for a school of the type envisaged was to be found at 18 Lower Kevin Street, on a site where William Fry & Co., cabinet makers and manufacturers of coachmakers’ wares, had previously had a factory and where the present DIT faculty of science is located.

Financed by public subscription and aided by a grant from Dublin Corporation, the Kevin Street Technical School opened for classes in October 1887, with W. Vickers-Dixon as principal, ten part-time teachers and seventy-eight students divided into fifteen classes studying twelve different subjects. By the end of that first year a total of 220 students had attended. All classes were held in the evenings. There were three types of classes:

- science and art classes leading to examinations of the Science and Art Department, and for which payment-on-results was given
technical classes leading to examinations of the City and Guilds of London Institute, for which payment-on-results was also given
• classes which led to school examinations.

The subjects taught in the 1888/1889 academic year were the following: practical plane and solid geometry, mathematics, theoretical and applied mechanics, machine construction and drawing, building construction and drawing, metal plate work, plumbing, carpentry and joinery, freehand drawing, modelling, theoretical and practical chemistry, sound, light and heat, electricity and magnetism, steam, photography, cookery, dressmaking and shorthand.

From its inception the school’s management committee had representation from Dublin Corporation, a number of the trades and academics from the Royal College of Science and Trinity College Dublin.

Two years later, the Agriculture and Technical Instruction Act 1889 enabled local authorities to make a levy on the local rates (taxes) to support technical education and supplement the central government funding. The levy was limited to 1d per £1 valuation. This dual source of funding remained a feature of the Irish technical education system but the local rates contribution gradually lost its relative significance.

The additional funds available facilitated the development of technical and technological education in Dublin. The success of the Kevin Street school further encouraged this. As early as 1891, Arnold Graves advocated the need for two further schools, one on the north side of the Liffey and one at Ringsend to cater for fishery and navigation. The Pembroke Technical and Fishery Schools opened in Ringsend in 1893 under the aegis of the Pembroke Urban District Council. In the same year Dublin Corporation first implemented the Agriculture and Technical Education Act 1889 and with the additional funds provided additional classroom accommodation across the street from the Kevin Street school in 37 Lower Kevin Street.

By the academic year 1896/1897, the range of classes provided in the Technical School in Kevin Street, had multiplied. They attracted an enrolment of 925 and were offered in the following discipline areas:

• science (practical plane and solid geometry, machine construction and drawing, applied mechanics and steam, inorganic chemistry, organic chemistry, sound, light and heat, electricity and magnetism, mathematics, building construction)
• art (freehand, geometrical and model drawing, modelling in clay)
• technology (boot and shoemaking, carpentry and joinery, metal plate
work, plumbing, woodwork, building surveying, tailors’ cutting, electric lighting, mechanical engineering, printers’ and decorators’ work)

• commerce (shorthand, book-keeping, writing, English, French, German, Irish)

• women’s work (dressmaking, cookery and laundry work).

To help solve the problem of congestion in the school, an extension was started in 1899 and opened the following year. It provided an additional floor area of 1,500 m² to add to the 700 m² in the original building.

County councils and urban councils were set up throughout Ireland by the Local Government (Ireland) Act 1898. Then the Department of Agriculture and Technical Education (Ireland) Act 1899 extended the provisions of the United Kingdom 1889 Act throughout Ireland. This Act eventually led, in 1900, to the establishment in Ireland of the Department of Agriculture and Technical Instruction (DATI), which was to provide funds to promote technical education in different parts of the country. The Technical Education Committee (TEC) was formed in 1900 by Dublin Corporation to manage and govern technical education in the city. Forty-nine such local technical education committees were organised around the country to provide courses in art, technology and science in urban areas and in manual instruction, rural industries and domestic science in rural areas.

The enrolment in the Kevin Street school in 1900 had grown to 998, putting pressure on the available accommodation. The TEC leased 12 Rutland Square (Parnell Square after 1933) in 1904 and transferred the commercial classes there the following year. In 1906 the TEC made the decision to follow Arnold Graves’ advice of 1891 to build a larger school on the north side of the city on Bolton Street. This was completed in 1911. At that stage classes in building construction and some engineering disciplines were transferred there.

Special courses in wireless telegraphy, telegraph construction and technical electricity for post office engineers were inaugurated in 1911 at the request of the Postmaster General. The wireless telegraphy course became controversial after 1916. The students on the course sought to have access to a practical ship’s wireless set and the TEC attempted to acquire one, but permission was delayed by the Postmaster General in London, pending consideration by the naval and military authorities. Permission was eventually granted on condition that no external or internal aerial was erected, that no attempt would be made to communicate with other stations, and that the apparatus would be supervised by an officer of the post office. The apparatus would be unsealed by this officer at the start of a class and sealed again at its end, and each student of wireless telegraphy
would have to be approved by the Postmaster General. Between January 1918 and March 1919, some 170 students entered this course and, of these, seven were not approved by the Postmaster General.

In the academic year 1912/1913, courses in chemistry for medical and pharmaceutical students, pharmacy, smiths' work, brass finishing, plasterer's work, painters' and decorators' work, tailors' cutting, woodcarving, clay modelling, stone and marble carving and decorative and ornamental ironwork, were taught in addition to those mentioned previously.

While the majority of the courses offered in the Kevin Street Technical School were at second level, i.e. for 14–16 year olds, there was a substantial element of higher level work as early as the first decade of this century. For instance in the academic year 1907/1908 students of the school won three of the five teacherships in training of the Royal College of Science, one taking the first place; four students qualified as teachers in chemistry under the DATI (Ireland); seven chemistry students were successful in the examinations for the Licentiateship of the Pharmaceutical Society of Ireland, one of them in first place; a number of students were successful in the degree examinations of the Royal University of Ireland, two achieving honours in chemistry; three students were successful in the external examinations of London University; the conjoint board of the Royal College of Physicians and the Royal College of Surgeons in Ireland inspected and recognised courses in physics and chemistry as satisfying the requirements for their first professional examinations. By 1910, students were asking that the Kevin Street college be made an examination centre for the London University BSc examinations, but this step was not taken until 1956.

From the foundation of the Kevin Street school there were elements of an academic structure. In 1896 for instance, there were five distinct categories of classes – science, art, technology, commercial and women's work. In 1911, after some courses had transferred to Chatham Row and Bolton Street, there were teachers employed in the following disciplines – mathematics, electrical engineering and physics, chemistry, botany, materia medica and pharmacy – which functioned as embryonic departments.

**Municipal School of Music, Chatham Row**

The Irish Artisans' Exhibition of 1885 also provided an impetus for the establishment of the School of Music. The Exhibition featured a competition for amateur bands organised by John O'Donnell. Following a resolu-

---

Historical Chronology of the Dublin Institute of Technology

8

Historical Chronology of the Dublin Institute of Technology

tion passed during the Exhibition, Mr. O’Donnell prepared a report on “The State of the National Bands of Ireland” in 1887. With support from the amateur bands in Dublin and the Royal Irish Academy of Music (RIAM), he subsequently persuaded Dublin Corporation to provide a grant of £300 for the establishment of the Municipal School of Music (MSM). This was housed in the Assembly Rooms, 58 South William Street (where the Civic Museum is now located) and opened in October 1890.

The Governors of the RIAM were to be the governing body of the MSM and initially they organised it as a complementary branch of the Academy. At its inception at least, teaching of singing, pianoforte, organ and stringed instruments was to be excluded, and the new school would concentrate on wind and percussion instruments. In its first year the new school provided classes in clarinet, cornet, drum, flute, oboe, piccolo, saxhorn and trombone for fifty-three students. In the following year alt horn, bombardon and euphonium were added to the instruments taught. However by the third year, singing by the tonic solfa method was being taught to 36 students. In 1900, twenty-one students were studying the violin and the following year the violoncello had been added to the list.

In 1904 the TEC undertook a survey of technical education needs and concluded that the programmes of the MSM were too limited under the RIAM and could be extended and would flourish under the TEC. As a result, in that same year the TEC took over responsibility for the MSM from the Academy.

The inadequacies of the Assembly Rooms for the work of the MSM had been pointed out repeatedly. In 1907 the TEC transferred the music school to the newly acquired former fire station on Chatham Row, which it shared with the courses in printing until they were transferred to Bolton Street in 1911.

In the early decades of the school, all music teachers were employed on a part-time basis, depending on the demand for tuition in the relevant instruments. Nevertheless a measure of the success of the music school in those decades was the annual listing of its prizewinners in the Feis Ceoil, the Father Mathew Feis and the examinations of the London School of Music.

Municipal Technical Institute, Rathmines

The Rathmines Urban District Council (UDC) established the Rathmines Municipal Technical Institute at 24 Rathmines Road in 1901. This was administered by the Rathmines Technical Instruction Committee (TIC), a sub-committee of the UDC. The technical institute initially had a school
of commerce only. In its first academic year it catered for 333 evening students, one third of them women. The declared aims of the institute were to work closely with commerce in developing courses for “persons of either sex”, and “ultimately to include a complete provision for higher commercial education for both the population of the Urban District itself and the neighbouring City of Dublin”.  

In 1908 a school of domestic economy, housed in rented premises at 52A Carlton Terrace in Upper Rathmines, was established by the TIC.

General commercial and language courses as well as specialised courses for bank, railway and insurance clerks were provided. The courses for railway clerks were designed in consultation with the four Dublin railway companies. The bank clerks’ courses were recognised by the Institute of Bankers in Ireland and were taught in part by bank officials. The courses for insurance clerks were developed in collaboration with the Chartered Insurance Institute and taught partly by officials of major insurance companies.

By 1912 there was a total enrolment of 509 students, 333 men and 176 women.

In 1913, a new building accommodating the technical institute and the Rathmines Public Library was first occupied. This allowed the overall enrolment to rise from 927 (345 men and 582 women) in 1913 to 1620 (612 men and 1008 women) in 1925. This new development brought together under one roof the schools of commerce and domestic economy. At this stage the higher commercial subjects taught included commerce, accountancy, accountants’ arithmetic, commercial geography, commercial history, auditing, commercial law, government accounting and finance, banking practice, law of banking, economics, statistical methods, foreign exchange, language and insurance. The courses in the school of domestic economy tended to be at junior or second level.

**Technical School, Rutland Square**

In 1905 12 Rutland (later Parnell) Square was acquired by the TEC and 18 Rutland Square was acquired in 1912. This latter site became for some 50 years a centre for commercial education and the teaching of domestic economy, mainly at the second level. Courses offered in the early years included book-keeping, accountancy, business methods, economics, com-

---


commercial correspondence, commercial arithmetic, commercial geography, shorthand, typewriting and retail grocery. Over the following years courses in Irish, French, German, health and life insurance, actuarial work and commercial law were added.

In 1915 the school of commerce in the Rutland Square school introduced a scheme to draw employers into the technical education system so as to provide a wider range of employment opportunities to students. With the involvement of employers in course design and work placement, day courses, initially for boys but later in the 1920s for girls as well, were developed in business methods and in shirt and clothing manufacture.

**Technical Institute, Bolton Street**

In 1906 the TEC was given approval by the DATI (Ireland) for the building of a new technical institute at Bolton Street on the site of the old European Hotel. The plans were ready in 1908 for what was to be the first building in the country specifically designed and built for technical and technological education. Completed in 1911, the building was opened for classes in the autumn of that year. Courses in construction and civil and mechanical engineering, which had already been developed in Kevin Street, were transferred to that site. A new course in building construction for architectural students was inaugurated at the request of the Architectural Association of Ireland. Courses in aeroplane construction were introduced in that first academic year, the year that Bleriot first flew a heavier-than-air machine across the English Channel. A course in land surveying was initiated and plans made for a course in motor engineering. The printing courses that had already transferred in 1907 from Kevin Street to Chatham Row, transferred to the Bolton Street institute in 1911. Indeed in the initial years the only full-time staff members in the Bolton Street Technical Institute were in the printing area, which in 1914 developed the first day-release apprenticeship courses in the country, three afternoons each week, for compositor and letterpress machine operators.

Most classes in the early years were held in the evenings. In 1920 however, additional full-time staff, including two joint principals, were appointed and the first full-time courses were begun that same year under a day apprentice scholarship scheme. The TEC awarded scholarships to

---

selected students for a two-year full-time course in a trade and these two years counted as the first years of the student’s apprenticeship. These day junior technical courses began in 1922 and continued until 1958, when they were transferred to second-level schools within the CDVEC system.

**OTHER HIGHER EDUCATION INSTITUTIONS IN IRELAND**

Before independence the main institutions of higher education in Ireland were the universities. The foundation dates of the university-level institutions in Ireland before 1922\(^6\) together with their current enrolments, are provided in table 1.1. The establishment of Saorstát Éireann (Irish Free State) in the twenty-six counties and the state of Northern Ireland in the six counties in 1922, divided the administration of education in Ireland, including higher education into the two jurisdictions.

**Table 1.1 University-level institutions in Ireland before 1922, with the year of foundation and equivalent full-time student enrolment in 1999/2000**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Year of foundation</th>
<th>Current enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Dublin (Trinity College Dublin, TCD)</td>
<td>1591</td>
<td>13,700</td>
</tr>
<tr>
<td>Royal College of Surgeons in Ireland</td>
<td>1784</td>
<td></td>
</tr>
<tr>
<td>St. Patrick’s College, Maynooth</td>
<td>1795</td>
<td></td>
</tr>
<tr>
<td>National University of Ireland, Maynooth, NUI Maynooth</td>
<td></td>
<td>4,700</td>
</tr>
<tr>
<td>Queen’s University, Queen’s Colleges</td>
<td>1845</td>
<td></td>
</tr>
<tr>
<td>Catholic University</td>
<td>1851</td>
<td></td>
</tr>
<tr>
<td>Royal College of Science</td>
<td>1867</td>
<td></td>
</tr>
<tr>
<td>Royal University of Ireland</td>
<td>1879</td>
<td></td>
</tr>
<tr>
<td>National University of Ireland (NUI)</td>
<td>1908</td>
<td></td>
</tr>
<tr>
<td>University College Cork, UCC, now NUI Cork</td>
<td></td>
<td>11,300</td>
</tr>
<tr>
<td>University College Dublin, UCD, now NUI Dublin</td>
<td></td>
<td>17,700</td>
</tr>
<tr>
<td>University College Galway, UCG, now NUI Galway</td>
<td></td>
<td>9,900</td>
</tr>
</tbody>
</table>

---

SUMMARY

From their very beginnings, the colleges that now constitute the DIT offered education and training at the leading edge of technology. They sought to determine the needs of industry, business and commerce in Dublin and nationally, and developed educational and training courses in disciplines and areas not catered for by the rest of the educational system. The courses offered had a strong vocational and applied thrust underpinned by a sound knowledge base. They provided educational opportunities for women from the early days and took measures to deliver educational opportunities to the less privileged in society and the broad layers of working people.

These characteristics were to shape the policies and commitments of the colleges that have become the DIT.