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**The emergence of teacher supply for adult education institutions and technical colleges  
from the 1850s to the 1960s and beyond**

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## **The emergence of teacher supply for adult education institutions and technical colleges from the 1850s to the 1960s and beyond**

### **Abstract**

When mechanics' and similar institutions became established for adults by the middle of the nineteenth century, there was goodwill amongst committee members and volunteers to teach the classes. The institutes were not government-funded and relied on patronage and membership fees to fund them. There was a shortage of teachers for the classes as those who were qualified were trained to teach in schools. In any case, many institutes could rarely afford to appoint more than one or two, if any, qualified teachers. However, the reputation and on-going success of such adult institutions depended on good quality teaching and learning. The Great Exhibition of 1851 in London had highlighted that Britain was losing its leading industrial position in the World. This shook the government and as a result Royal Commissions were set up which, ultimately, resulted in the Technical Instruction Act of 1889 and the Local Tax Act of 1890, both of which in their own way resulted in state funded support for adult technical education. Between 1900 and 1940, further education was established but the First World War and the Great Depression prevent expansion. The findings of the McNair Report of 1944 highlighted the need for technical training colleges to support those wishing to teach and lecture in further education. The paper summarises how teacher supply was variable for adult education and how teaching training for the lifelong learning sector came about.

Key Words: Nineteenth-century working-class institutes, The Great Exhibition, Royal Commissions. Technical Instruction and Local Tax Acts, McNair Report, Technical teacher training colleges

### **Introduction**

The traditional ways of learning skills for trades and agriculture were passed on from father to son, mother to daughter. It was a tradition that went back centuries in all parts of the World. However, in Britain from the 1790s, with technological developments in industry and associated social changes, these methods were no longer appropriate. The wealthy classes were classically educated whereas engineering and other subjects required for the new age were often developed through trial and error by inventors and the emerging industrialists. As the Industrial Revolution 'took off' there was an urgent need for a skilled and educated workforce. Employers of the new industries were becoming concerned that if their workforce could not read instructions, they would not be able to maintain and service machinery which were both expensive

to purchase and to keep in running order. The Marchioness of Londonderry, for example, insisted that boys should not work underground in her North East of England collieries until they had gained a certificate in reading and writing. The need for an elementary education among the working classes became more urgent though formalised in law with the passing of the Malicious Injuries to Property Act of 1861 which stated that if workers damaged property or machinery, even if unintentionally, they could be prosecuted. If found guilty, they could serve a life sentence or any term not less than three years, with or without, hard labour ([www.opsi.gov.uk](http://www.opsi.gov.uk)). The Act obviously favoured the employer rather than the employee, the latter highly unlikely to be able to read instruction and maintenance directions. It was against this backdrop, that working-class adult education evolved.

### **Nineteenth-century working-class educational institutes**

From the 1820s mechanics' institutes or similar, such literary and scientific institutes (herewith referred to as institutes), were being established for adults in the industrial areas of Scotland, the North and Midlands. Initially, many concentrated on scientific education but realising that those for whom they were established, the working classes, rarely attended or could afford the fees, they reinvented themselves during the 1840s, through offering elementary education as well as more advanced subjects relevant to local industry.

By the 1850s, working-class institutes of one kind or another were being established all over Britain, not only in the industrialising towns but also in rural and semi-rural areas. While it is not surprising that Lancashire, Yorkshire and the Midlands were well-serviced with a variety of institutes, more rural areas such as Cornwall, Devon and Hampshire also had several institutions. They were also established in South Wales

and Ireland (Walker 2013). Similar developments were taking place overseas, particularly in Europe, America, Australia, Canada and New Zealand (Walker 2017).

These institutes were founded and financially supported by local dignitaries including employers and land owners, both Whigs and Tories, and particularly Quakers and Nonconformists. They were self-funding, relying on membership fees and income from art and design exhibitions until the 1880s when government began to seriously fund adult education and training. Many were to go on to become schools of art and design, technical schools as well as technical and further education colleges during the twentieth century.<sup>i</sup>

### **School Teacher Training**

Historically, teacher training was established to support the teaching of children rather than adults. Quakers, many of whom were industrialists would become supporters of working-class adult education for both men and women as well as school-age teacher education. It was this group who first developed teacher training in Britain with the establishment of Borough Road Teacher Training College founded by Joseph Lancaster in 1798. The first Anglican teacher training college was St Mark's located in Chelsea in 1838. Later, it relocated to Plymouth and was renamed the College of St Mark and St John (Hencke 1978). The third of these early establishments was Battersea Training College which was opened in 1840 with support from Dr James Kay M.D., who later become Sir James Kay-Shuttleworth through marriage (Curtis 1967). Further teacher training colleges were introduced between 1846 and 1902, which included several founded by Roman Catholics, Anglicans and Non-conformists. With the passing of the 1902 Balfour Education Act, whereby Local Authorities were given responsibility for school state education, they also became involved in establishing teacher training colleges (Hencke 1978). However, neither voluntary or

state-funded teacher training was extended beyond school-age provision and therefore there were no training colleges for those wishing to teach and train adults as it was thought they could 'learn on the job' having industrial experience.

Kay had been a physician in Manchester at the time of the 1832 cholera epidemic and believed that education for all was a means of improving living standards, particularly in the industrialising towns. He was a supporter of schools, libraries and mechanics' institutes as well as providing education for all. Kay supported several institutes and was one-time president of the Burnley Mechanics' Institute in Lancashire near where he lived. Like many Unitarians, he was mistrusted by the establishment which made his task of convincing Parliament that there should be state education for all challenging to say the least.

Kay believed that the monitorial system was a failure, disagreeing that instructing one child to teach others was not the way forward. However, while visiting a workhouse school where he was informed that the master was off sick that day and the class was being taken by an older pupil, Kay conceded that the pupil 'was teaching the class with great success' (Curtis 233) He also noticed this was the case in other workhouse schools that he visited. Kay was therefore keen to encourage the older pupils to teach the younger ones under supervision in many school establishments. He believed that a period of apprenticeship in the art of teaching was important. These assistants were called pupil-teachers. It was only with the passing of the 1902 Education Act that pupil-teachers were phased out altogether, to be replaced with full-time three-year training programmes for those wishing to teach in schools.

### **Post-school teacher training**

When mechanics' institutes and similar adult working-class institutions were firmly established from the 1850s, most teaching was carried out by committee members and volunteers. Many institutes supported elementary education in reading, writing and arithmetic by voluntary school teachers and committee members while local employers and skilled craftsmen taught the advanced subjects such as chemistry, building and construction, and engineering. Most institutes could rarely afford to appoint more than one or two qualified school teachers and then only on a part-time basis in the evenings after teaching all day in their schools. Smaller institutes relied solely on volunteers with no formal teaching qualifications.

The development and concentration on school-based teacher training after the passing of the Education Act of 1870, meant planning and resources were concentrated on this sector rather than that on adult education. In any case, there was a teacher shortage as those working as qualified teachers were fully employed working in schools. In any case, pressure from government expected qualified school teachers, who were supported by the state, to work in elementary schools rather than in adult education institutions.

Some institutes introduced their own version of pupil-teachers who were former students, employed locally in industry and after work they taught on a part-time basis. The Annual Reports of the Yorkshire Union of Mechanics' Institutes (hereafter referred to as Annual Report) have provided informative insight in teaching in the Union institutes. At the Huddersfield Mechanics' Institute in 1848, for example, the Committee reported that:

It is truly encouraging to find young men who have received instruction in our classes, so willing to impart their knowledge to others; and when it is remembered that they belong to the industrious classes, that their teaching is entirely voluntary, and that they attend regularly week after week ...the whole

noble band of voluntary teachers, as constituting the mainstay of the Institution (*Annual Report 1848 55*).

The Institute had realised that in order to respond to the shortage of teachers it would have to establish its own teacher training programme to support the students (*Annual Report 1850 40*).

Four years later, the Huddersfield Mechanics' Institute Committee reported that the teachers who volunteered their services for free, in effect kept the Institution together financially. It appreciated the hard work that all teachers did through 'discipline and efficient teaching' which contributed to the success of the Institute. (*Annual Report 1854 53*)

In the minutes of the 25 November 1825, the Huddersfield General Committee noted that:

it was hoped that a class of subordinate teachers may be raised among members themselves, receiving a small remuneration and regularly recognised as part of the educational staff of the Institution where they have received a considerable portion of their education (*Huddersfield Institute Minutes of the General Committee for 25 November 1855 198*).

The Committee seems to have valued the service that these non-qualified teachers offered, not only in financial terms, as most volunteered or received a small salary, over and above their wages in industry or trade, but also professional recognition on a par with qualified teachers who taught at the Institute. This recognition was noted at the Huddersfield Mechanics' Institute Annual Soirée in 1855, at which prizes for assistant teachers were awarded (Huddersfield Institute General Minutes 25 November 1855). The Rev. Richard Dawes, the Dean of Hereford, speaking at the Annual Soirée, stated that the shortage of qualified teachers for adult institutions was a national problem but that within the school training colleges some training was taking



place that would support the institutes through subject-based pedagogy such as science and commercial subjects, both of which were offered in adult institutions.

During the autumn of this year (1855) being at Chester, I visited the Training College...the training of masters there seems to me to be admirably fitted for teachers in such Institutes as yours. There is a scientific and commercial school attached to it in which youths are instructed in the application of science and commercial life (Dawes 1855 32).

Dawes also gave the example of the Crewe Institute and several in the Potteries that had successfully received grants from the government Department of Science and Art to fund qualified teachers for two years and as a result membership had increased, bringing in additional income which meant that after two years the institutes were able to continue to pay their salaries. Dawes hoped that Huddersfield would consider the same arrangement.

The Department of Science and Arts, as referred to by Dawes, had been set up following the Great Exhibition of 1851 in London at which many foreign exhibits were of a much higher quality than those produced in Britain. In response to foreign competition threatening Britain's manufacturing supremacy, the government realised the urgency of setting up some systematic organisation of supporting technical education. As part of its remit, the Department of Science and Art provided funds for institutions where the quality of teaching was seen as a high standard by government inspectors. Institutes were paid by examination results and general quality of teaching although the majority of the teachers were not qualified.

The Department had begun offering examinations from 1860 and the success of students taking them could include payment to individual institutions of £3 for every first class, £2 for second class and £1 for third class examination pass results (Foden 1993, p.4). It also provided grants for 'school teachers to become qualified in the

teaching of science' (p.5). However, it was more common for former students of the institutes to continue to offer their services as unqualified teachers or volunteers who had been awarded certificates in technical subjects or who had subsequently gained industrial experience, or both. For example, Thomas Broadbent was one of several former students who returned part-time to take classes at the Huddersfield Mechanics' Institute. He had sat Society of Arts examinations in 1857 at Huddersfield and gained certificates in seven subjects. He later established his own woollen mill in the town and had a patent put on his invention, the wool extractor fan, which was a commercial success. He continued to support the institute through taking classes for the rest of his life (Walker 2008).

As well as the Department of Science and Arts own technical examinations, the Society for the Encouragement of Arts, Manufactures and Commerce (hereafter referred to as the Society of Arts) also introduced scientific and commercial examinations. These were initially administrated through their London Headquarters and in 1857 by the Huddersfield Mechanics' Institute for centres in the North. The success of the Huddersfield 'pilot' resulted in several centres throughout the country offering Society of Arts examinations over the following years (Walker 2008). This arrangement would also be taken up by the City and Guilds of London Institute for the Advancement of Technical Education (hereafter referred to as City and Guilds London Institute) at the end of the nineteenth century and other awarding bodies thereafter. With the establishment of national examinations, there was the urgent need for qualified teachers in technical and commercial education.

Franck Curzon, who had been the secretary to the Huddersfield Institute, appeared before a government commission in his role as secretary to the Yorkshire Union of

Institutes to support the need for qualified teachers in the institutes (Annual Report 1879). He highlighted the serious concerns the shortages of good qualified teachers were having on the work of institutes. He particularly raised concerns that there were few teachers trained in the teaching of science subjects for adult students who attended institutions (Foden 1993 8).

Meanwhile, the City and Guilds of London Institute was established and concentrated on offering technical examinations from the 1880s while the Society of Arts focused on commercial examinations. These quite substantial developments meant that there was an urgent need for good teaching at both elementary and higher level in order for institutes to attract grants from the Department of Science and Arts.

Perkin (1993) noted that it had been brought to the attention of the Taunton Commission on the state of middle-class schools in 1868 that there was a professional class:

with fine and governing qualities but without the idea of science, while the immense business class which is becoming so important a power...on which the future depends is cut off from the aristocracy and the professions (Perkin 1993 82)

This highlights the point that those who taught in the institutes had themselves learned science and other non-classical subjects and then progressed as pupil-teachers and unqualified teachers into the technical teacher profession, in contrast to school teachers who had had a classical education and often continued to teach the classics in the schools in which they were employed.

Huddersfield Mechanics' Institute realised that the shortage and non-technically qualified teachers was preventing both growth and quality of teaching and learning in technical subjects. It was therefore decided to offer qualified school teachers the

opportunity of continued professional development in support of both school and adult technical education from 1876; both in support of its own students and those at other institutes (*Annual Report 1876* 157).

In the same Report a table of the occupations of members included 53 teachers, the eighth highest number of those attending the classes at the Institute, clearly indicating that they were continuing with their studies (*Annual Report 1876* 160). Several students in the perspective drawing and geometry courses in the School of Art Department at Huddersfield were pupil-teachers in 1879 and were training to become 'teachers of drawing' (*Annual Report 1879* 110).

In 1880, at Huddersfield there were two pupil-teachers to support the Institute but there was still a need for qualified teachers to support the Institute (*Annual Report 1880* 104). An advert was put in the *Huddersfield Weekly News* in 1882 wanting a qualified teacher to teach mathematics Stage 1 in preparation for the Science and Art examinations at the Institute, on Monday, Wednesday and Friday evenings (*The Huddersfield Weekly News* 8 July 1882).

Huddersfield Technical School and Mechanics' Institute, as it became known in 1883 with the merging of the male and females institutes, offered pupil-teachers' classes for students who were trained to teach while learning and who wished to gain a teaching certificate to work at the Institute or for the Huddersfield School Board. Some of the pupil teachers did progress to become fully qualified teachers on courses from the 1880s when teacher training was introduced at Huddersfield in support of both the Institute, and other local education establishments. The Annual Report of 1886 stated:

A complete scheme of classes [Science and Arts] is now in operation, whereby the School practically does the work of a training college. This should be a great boom to all Ex-P-T's [former pupil-teachers] in the neighbourhood who want their teacher's certificate without going to a college for it' (*Annual Report 1886* 108).

The programme was advertised as thus:

**Pupil-Teachers' Classes delivered on behalf of the Huddersfield School Board through the Technical School and Mechanics' Institute**

1. Classes are offered for Pupil Teachers' in English literature, botany, Latin, French, and singing.
2. Classes meet weekly on Saturday mornings and Wednesday evenings.
3. It is obligatory upon Pupil Teachers in the Board Schools to attend the classes.
4. A Head or Assistant Teacher will be present at each meeting to record attendances.
5. Pupil Teachers are expected to be in their places five minutes before the time for commencing, in order that the lectures may begin punctually at the time stated.
6. A separate notebook must be kept for each subject and on Thursdays of each week Pupil Teachers' should have their note-books at their respective schools, in order that they may be seen by the Board's Inspector, should he call for them.
7. Two Examinations will be held during the year (June and December) on the work of various classes and a report with lists of marks will be sent to the Board.
8. Head Teachers should not detain the Pupil Teachers past 4.30 on Wednesday afternoons nor set them any lessons to prepare for the following day, the time for instruction of Pupil Teachers on the Thursday being devoted to oral teaching. (Huddersfield School Board Pupil Teachers' Classes Poster 1880).

The 1886–1887 *Prospectus of Evening Classes at Huddersfield* included a section advertising teacher training at the Institute and giving advice with regard to funding arrangements for those wishing to apply. The timetable accompanying the training classes for teachers made reference to the subjects being offered and indicated that male and female trainees were taught in separate classes for arithmetic classes. The programme was delivered over three years, the first and second year concentrating on the teaching of the student's specific subject selected from French, drawing, English literature, music, mathematics, geography, history, Latin, and domestic economy (home economics) as well as practice and theory and principles in the art of

teaching. Students were expected to be present each week in their school at a criticism lesson (feedback on teaching practice) and all notes on lessons taught and lectures had to be submitted to Her Majesty's Inspector at his annual visit. The whole of the third year concentrated on revision for the examinations which took place at the end of the course (*Prospectus of Evening Classes, Session 1886 – 1887* 79-81).

### **Teacher Training Certificate and Matriculation Classes at Huddersfield**

The Government invite attention to the following scheme of classes especially arranged for preparing students for the Elementary Teachers' Certificate Examination: A three year course under Article 110 of the New Code without the loss of time involved in going to Training College.

The Scheme has been approved by the Education Department and Huddersfield School Board, and managers of schools should have little difficulty in seeing its benefits for any school.

The following inclusive fee will be £3 per session but the grant of £10 or £15 under Article 110, would be more than refund this amount.

The attention of Certificated Teachers wishing to matriculate at London University is also invited to the fact that the subjects marked LM (London Matriculated) in the scheme are included and in addition to these only Greek and German and an elementary knowledge of chemistry and physics are required. Classes for the study of all these subjects are regularly carried on'.

Thus, a student could work with the double object of sitting for his certificate, and shortly afterwards matriculating, without materially increasing his hours of study; or each examination could be worked for separately. (Women attended separate training colleges). The total fee for taking the Certificate and Matriculation course combined would be £4 per session, or either course separately £3 per session (*Prospectus of Evening Classes Sessions 1886 – 79*).

### **Technical Instruction and Local Tax Acts**

Two Royal Commissions Reports, the Devonshire Report of 1875, which looked into scientific instruction, and the Samuelson Report of 1884, which had looked into scientific and technical instruction, were set up following the concerns identified by the high quality of overseas goods exhibited at the Great Exhibition of 1851. Their findings required the need for government-funded support for adult technical education. Their

findings resulted in the passing of the Technical Instruction Acts of 1889 which gave local authorities the power to levy one penny on household rates to provide funding for technical courses, appoint teachers and provide grants to technical schools and institutes. Marsden (1996) believes that the Act was 'the first useful piece of parliamentary legislation passed in Britain in support technical education' (p.44). The Act specified:

Instruction in the principles of science and art applicable to industries, and in the application of specific branches of science and art to specific industries or employments...it shall include instruction in the branches of science and art with respect to which grants for the time being made by the Department of Science and Art, and any other form of instruction (including modern languages and commercial and agricultural subjects) which may for the time being be sanctioned by the Department by a minute laid before Parliament and made on the representation of a local authority that such a form of instruction is required by the circumstances of its district (Technical Instruction Act 1889, Section 8 in Musgrave 1964,107 – 108).

Crucially, the key feature of the Act was to aid 'instruction in the principles of science and art applicable to Industry and agriculture (Musgrave 1996 179).

A year later, in 1890, the government passed the Local Tax Act which included putting a duty on wines and spirits, referred to as *whisky money* and the income raised was used to fund technical education. Fieldhouse (1998) identified that with the passing of the 1889 and 1890 Acts, they raised between them three-quarters of a million pounds in 1891. By 1900, this had increased to over a million pounds in providing state-funded adult education (p.43). When the tax ceased in 1902, state funding for technical education was already well established through central funding from government (Curtis, 1967, 497).

### **Twentieth-century developments**

Venables (1956) noted that the Tax Act of 1890 was a stimulus for rapid development in the umber institutions offering technical education throughout the country (p.22). Some of these were developing out of the nineteenth-century institutes while others were

new technical schools and colleges including Bath, Birkenhead, Birmingham, Blackburn, Bolton, Bradford, Brighton, Bristol, Burnley, Bury, Cardiff, Derby, Dewsbury, Glasgow Halifax, Huddersfield, Keighley, Leeds, Liverpool, Norwood, Wandsworth, Manchester, Portsmouth, Preston, Rochdale, St Helens, Salford, Southampton, Swindon, West Bromwich, West Ham, Westminster and Wolverhampton (p.22). No surprisingly, the pace of growth was interrupted by the First World War and the Great Depression during the early 1930s. Crucially, it was the technical colleges that were able to respond to the demands for technical developments both during and after the Second World War.

The Education Act of 1944 reformed and expanded state education opportunities and therefore the need for more qualified school teachers. It gave more responsibilities to local authorities to be responsible for education provision. As Hencke (1978) noted, the Act also included the raising of the school leaving age to fifteen which meant that there was a further shortage of qualified school teachers. The result was that nineteen emergency colleges were established which brought the total number to forty by 1948 specifically for the training of school teachers. There was no mention to the training of college lecturers.

As the old institutes were being replaced (many of which became free libraries), with twentieth-century colleges, so too was there an urgent need for specialist qualified teachers in technical subjects rather than relying on volunteers and school teachers, as had been the case in the past, an ad hoc arrangement to say the least. This arrangement could not continue with the pace of technological developments and education required to support twentieth century industrial and further education expansion. As Bailey (2007) identifies, there was no provision of teacher training specifically for those teaching in technical and further education colleges until after the



Second World War' (279). As had previously been the case, post-school age institutions and colleges continued to rely on unqualified lecturers from industry and commerce and qualified school teachers who were more accustomed to supporting education on non-technical programmes.

### **The McNair Report and after**

In 1944, the Board of Education published *Teachers and Youth Leaders. Report of the Committee appointed by the President of the Board of Education to consider the supply, recruitment and training of teachers and youth leaders*. This was more commonly known as *the McNair Report* which had sat from 1942 to 1944 and had highlighted the need for specialist training for those teaching in the relatively new and emerging technical colleges (Robertson, 1994). The *Report* strongly argued that technical education had received little attention, and McNair had identified some of the special characteristics and needs of technical teachers. As Cook, Fisher and Walker (2008) point out, the McNair Report had identified that it would be very difficult to attract men and women from industry to take a break from employment and embark on a full-time teacher bursary only teacher training programme. The Committee believed that it should be possible therefore for those working in technical colleges to qualify as teachers through an in-service route (p.28). The programme would be module based, and completed over two or three years alongside teaching in colleges where teaching observations would be part of the assessment.

The impact of the McNair Report on teacher training in colleges was substantial. Not only did the Report highlight the importance of introducing a specialist teacher training programme specifically for those working in technical colleges but also requested government funding to establish technical teacher training colleges to deliver such provision. As with school teacher training colleges, funding and

management would be through the local authorities. The findings of the Report resulted initially in four technical teacher training colleges being established. The first one was launched at Bolton in February 1946 which would later become part of Bolton Institute of Higher Education and from 2004 the University of Bolton. The second was opened at the North Western Polytechnic in October 1946. In 1950, the College separated from the Polytechnic under the control of London County Council and in 1953 was renamed Garnett College. Later, it became incorporated into Thames Polytechnic and is now part of the University of Greenwich. The third college was opened in April 1947 at Huddersfield and was known as the Technical Teacher Training College (Cook, Fisher and Walker 2008). Barnard (1964) noted that all three colleges benefited from industrial skilled workforce as well as entrants from the armed services, all of who wished to teach in technical colleges. It is, however, significant that there had been some discussion of closing one of the original three for economics of scale but decided against it as the 1960s saw a substantial growth in students attending technical and further education colleges. The fourth of these 'emergency colleges' was the Wolverhampton Technical Teachers' College which was opened in 1961, became part of the Polytechnic and went on to be part of the University of Wolverhampton (Cook, Fisher and Walker 2008). Subsequently, several universities across England and Wales, like the four above, are or have been involved in offering teacher training qualifications for the post-compulsory education sectors, now often referred to as the Lifelong Learning Sector. As well as offering university higher education teacher training programmes, colleges offer a variety of awarding body qualifications, particularly through the City and Guilds London Institute.

## **Conclusion**

This paper has attempted to provide some insight into the challenges that adult working-class institutes had with regard to providing quality teaching in support of technical education for industry and commerce. The findings of the 1851 Great Exhibition where exhibits from overseas competitors were seen as better quality than those produced in Britain, shook the government to respond to the urgent need for an educated and skilled workforce. While institute committees recognised that technical education was best delivered by workers themselves, they did also have support from qualified school teachers who often taught the elementary subjects of reading, writing and arithmetic. However, although good examinations resulted in receiving grants from the Department of Science and Art, institutes often relied on committee members or former students as either volunteer teachers or pupil-teachers to support.

With the shortage school teachers, following the passing of the Education Act of 1870 and the subsequent establishment of School Boards, qualified school trained teachers were in short supply and an increase in 'emergency' teacher training colleges alleviated this, but qualified teachers were expected to teach in schools for which they were funded and trained. It was the findings of the McNair Report that highlighted the need for specialist teachers for technical colleges and to do this specialist technical teacher training colleges were required. Following the establishment of the four 'emergency' colleges for technical teachers and their subsequent merger into universities, other higher education providers subsequently offered similar qualifications, both full-time and part-time, In the case of the latter, enabling those who had had previous careers in industry and commerce the opportunity to qualify as teachers in further education.

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*Annual Report of the Yorkshire Union of Mechanics' Institutes, 1850.*

*Annual Report of the Yorkshire Union of Mechanics' Institutes, 1854*

*Annual Report of the Yorkshire Union of Mechanics' Institutes, 1857.*

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<sup>i</sup> For further reading on the Institute movement, see Kelly, T. 1957. *George Birkbeck, Pioneer of Adult Education*. Liverpool: Liverpool University Press. and Tylecote, M. 1957. *The Mechanics' Institutes of Lancashire and Yorkshire Before 1851*. Manchester: Manchester University Press.