

New York, April 20, 1883. [three weeks after Peter Cooper's death on April 4, 1883]

## THE COOPER INSTITUTE

[Ed. note: The structure of The Cooper Union at its founding is nearly identical to its structure today, except that the Art School was only for women and was held during daytime hours, the Engineering School for both men and women was called the Evening School of Science, and the Architecture School was for men and was called the Evening School of Art. At the end of every class, an examination was given, and proficiency was awarded with a certificate. Those who completed all classes in the four-year curriculum were given a diploma and a medal. The four paragraphs on this page were written by Charles Edwards Lester. The text has been reduced from that in <http://www.notnicemusic.com/cooper.pdf>. Underlined text for those who are really in a rush.]

The founding of the "Cooper Union of Art and Science," was the great achievement of Cooper's life. It was entirely his own creation. It was his life work. In comparison with it, he regarded all his other labors as insignificant. Among his parting words, amidst tender words to his children who stood round his bedside, were whispered utterances, almost with his last breath, about the Cooper Union.

While he was serving as assistant alderman in 1828, he had fully determined to make arrangements for the construction of the great institution which bears his name, and he lost no opportunity to gather information from the best sources relative to such a work. He had from 1839 been a most active member of the Public School Society, till it was superseded by the Board of Education, of which he was elected president. Here he first entered upon what he called "the hobby of his life;" saying to some of the principal citizens that "he hoped he should live to see the day that better provision would be made for free instruction, especially for those boys and girls who were unprovided with the means of education." He had had to do nearly all the work in the Public School Society. Others were too much occupied with their own affairs or less enthusiastic than himself.

The only institution he could learn of in the world that carried out in any considerable degree the objects he wished to attain, was the Polytechnic School of Paris. It had received the special attention of a well-informed American gentleman just returned from France, who represented that the pupils who were admitted had, many of them, been obliged to go through great hardships to get the benefit which the lectures and instruction afforded. Mr. Cooper conversed with professors and teachers of higher schools, and having at last settled upon the kind of a school that was most needed for those having no other source of advancement, and having laid up, with a view to such an ultimate result, money enough to start on, he proceeded to buy the ground for the building, keeping his purpose pretty much to himself. He was his own architect. Being a master mechanic in several trades, and having erected large edifices, he justly felt himself competent to do that work, commanding such assistance all through, as he needed, and subjecting his plans to the severest criticism on all occasions. He was determined to put up a building as nearly fire-proof as could be made, since it was to be of stone, brick, and iron. [Ed. note: Lester is not conversant in the relative fire safety of the Foundation Building's wrought iron vs. cast iron.] The corner-stone of the Union was laid [, and w]ithin that stone was placed a scroll which bore this inscription: "The great object that I desire to accomplish by the erection of this institution, is to open the avenues of scientific knowledge to the youth of our city and country, and so unfold the volume of Nature, that the young may see the beauties of creation, enjoy its blessings, and learn to love the Author from whom cometh every good and perfect gift."

The school was "to be forever devoted to the Union of Science and Art in its application to the useful purposes of life." The work went steadily on under his direct supervision for five years; and from the foundation, deeply and securely laid, rose a brown-stone and iron structure of massive Roman architecture, rising four lofty stories above the great basement hall, which has ever since been the largest and most popular lecture-room in the city. The original plan embraced a sixth story, which was to be added in subsequent years, as the demand for increased facilities for education multiplied. When it was completed, the structure had cost, together with the expense of the ground, nearly seven hundred thousand dollars. This was in the cheap days of New York, and every dollar of that money had been earned by Mr. Cooper. Further expenditures, which have been steadily increasing, with his own endowments, made the entire outlay at the time of his death considerably more than one million dollars. Large areas were devoted to rent for business purposes, so that from all sources

the income for several years has exceeded \$50,000 per annum. It therefore rests upon a permanent foundation: all the work of one man, without the contribution of a dollar from any other source.

[According to] the Report of 1879 of the United States Commissioner of Education:

The Cooper Union Free Schools afford a remarkable example of the intelligent application of a great charity. Their purpose is the technical instruction of the laboring classes, which is accomplished through the agency of a free library and reading-room, free lectures, and two classes of schools, viz., the Evening Schools of Science and Art, and the Art School for Women. The course of study in the former, embraces the ordinary English branches, with advanced courses in mathematics, mechanics, physics, literature, and rhetoric. The art department of the evening schools, embraces instruction in all branches of drawing, viz., free hand, architectural, mechanical, and drawing from cast; also industrial drawing, and design and modeling in clay. Women are admitted to the scientific classes, but not to the art classes, a special school of Art being maintained for them. The latter is divided into five departments - drawing, painting, photography, wood-engraving, and normal teaching.

In both of the Art schools the training is constantly directed to the preparation of the pupils for those employments in which the arts of design and drawing are the principal or accessory occupations; 2820 pupils were registered the present year in the Evening Schools of Science and Art, of whom 2707 were engaged during the day in various trades and occupations. Owing to the exigencies of their industrial life, but few of the pupils can remain long enough in the institution to complete the whole course and receive the diploma and medal of the Cooper Union. Certificates of proficiency are awarded to those who pass satisfactory examination on the work of a particular class; 634 such certificates were awarded in 1879.

The number of pupils admitted to the free morning classes of the Woman's Art School, was 255, and to the engraving class for women, 37. In the art school the earnings for the year were \$9,525.75, and in the engraving class, \$1,820.59. All money earned in the schools belongs to the pupils, and a number are thus enabled to support themselves while studying.

The subsequent career of the graduates is followed with constant interest, and the facts thus brought to light, afford the most gratifying evidence of the practical results of the instruction. A large proportion of the graduates command lucrative positions as teachers of art, photo-colorers, decorators, and designers.

The school of telegraphy for women admitted 35 pupils the present year. The Western Union Telegraph Company has so far interested itself in the school, as to nominate a teacher who trains the pupils in the thorough methods of that company. Although under no agreement to provide places for the scholars, the Company has employed a large proportion of the graduates on its lines.

Instruction in all the schools and classes above described, together with all privileges of the institution, is absolutely free. In consequence of the great pressure for admission, and the earnest offer of many to pay for their instruction, the trustees have allowed an amateur class to be formed, which meets in the afternoon out of the regular class hours, and the members of which pay a small fee. Half of the money thus realized goes to the teacher, and the other half to the free schools. The fees for the present year amount to \$2326."

[According to] the Twenty-third Annual Report of the Trustees of the Cooper Union - May 27, 1882:

Applicants for the school in 1871-72 was 173, in 1881-82 was 1,397.

The number of admissions in 1871-72 was 173, in 1881-82 was 711.

The number of classes in 1871-72 was 3, in 1881-82 was 14.

The total number of pupils in the school who are earning, is 113, of whom 51 are in the photograph classes, and 27 in the engraving class. All the money earned belongs to the pupils themselves. Last year's report, *i.e.*, the annual report of 1880-81, shows that \$19,480.25 was

earned, making an increase in this year's report of \$9,452.32. This is very encouraging, as this season there has been in larger number than usual of new scholars in the Art School.

This growth of the school is gratifying; yet, at the same time, one cannot but reflect that 686 persons, or nearly as many as were able to be admitted, were disappointed in their efforts to gain admittance. Were the Art rooms as large again, the income of the Cooper Union double, and the general appliances of casts, books, etc., double, we could use them all.

The present trustees [after Peter Cooper's death] are ex-Mayor Edward Cooper, the founder's son; Mr. Abram S. Hewitt, Peter Cooper's son-in-law and business partner; Mr. Daniel F. Tiemann, Mr. John E. Parsons, and Mr. Wilson G. Hunt. It costs about \$50,000 a year to run the institution, and it is practically self-supporting, the income being derived from the rents of the stores in the lower part of the building, the great hall in the basement. and the interest on the founder's endowment fund. But hundreds of applications are annually refused for lack of accommodations. The entire expenditures of the trustees [including when Peter Cooper was a trustee], on the building and education from 1859 to 1882, inclusive, were only \$1,549,192. Reckoning the thousands of pupils that have passed through its classes, and the hundreds of thousands benefited by its other advantages of instruction, this comparatively small sum spent in twenty-three years will appear a very economical means to very large and useful ends.

[Ed. note: The remainder of the text comes from an anonymous writer in *The New York Herald*, and is presented without quotation marks]

A quarter of a century ago, lacking one year, Peter Cooper realized the dream of his life in the establishment of the institution which bears his name. Believing, as few, very few, rich men do, that his wealth was a sacred trust to be used for the benefit of his fellow-creatures, Mr. Cooper gave not merely of his money, but his life thenceforth, and anxious thought to the building up and maintenance of the Cooper Union for the Advancement of Science and Art. The title, while it expresses a high purpose, falls far short of conveying any idea of the vast range of the good work of the Union. The advancement of science and art is well enough; but to teach, without one cent of charge, 40,000 men and women to earn a good living at skilled trades; to cultivate, without money and without price, the hands and brains of scores of thousands so that they may advance themselves in the world, and to exalt, mentally, morally and physically, the poor and friendless, are far nobler objects. What the schools of the Cooper Union do is to give boys and girls that practical education which will be inestimably valuable to them in their trades and professions, and enable them to earn bread and butter, and something besides, for their families.

The schools occupy the greater part of the building. The whole of the large structure above the reading-room, which is on the second floor, is divided into classrooms and devoted to educational purposes of a wide range. There are now thirty-five hundred pupils, and there would be many more if the building would accommodate them. The demand is growing every year, and in all the departments the applicants seeking admission far exceed the accommodations. In some classes the number of those who were turned away at the beginning of the present year, was greater than the number admitted. The pupils are received on the simple rule of first come first served, the necessary qualifications on the part of the applicant being good character, a suitable age, and an expressed intention to turn the advantages of the institution to industrial purposes and self-support. Great care is taken to select for admission those who are the least able to pay the usual charges of educational institutions for special instruction. Young men and girls with poor parents, or who are dependent upon their own resources, are always given the first choice. Amateurs in art or science are not wanted and not admitted, with a single unimportant exception, to be hereafter explained. Such is the reputation for thoroughness in the instruction given in these schools, that many parents who can and will pay liberally are anxious to have their children received. The building could be filled with these amateurs twice over every season, but it would be directly contrary to the wise purposes of the founder to receive this class, and they are never knowingly taken. The private pay schools furnish ample provision for them.

"It is a great pity we have not more room," said Curator Zachos; "this great institution should be multiplied fourfold. In some of the branches - notably the women's art school - applicants for admission sometimes wait for two years before they can be received. We use every available inch of room."

The actual work of the Cooper Union is one of the largest of any educational institution in the world. The reading-room furnishes amusement and instruction to over two thousand people every day, and over three hundred papers and magazines and five hundred books are called for. It is open from eight in the morning until ten at night through the week, and on Sundays after twelve o'clock, and every respectable person is admitted without any formality or restriction. It is the largest reading-room in the country, is well lighted and comfortable, and fully supplied with the periodical literature of many languages.

But the reading-room is the least important part of the educational machinery of Cooper Union. The number of pupils who entered the various classes last year was 3334. And besides these there are public lectures every Saturday night during the fall and winter in the great hall of the Union, where about two thousand people assemble once every week, to hear the most distinguished men in the country discourse upon the questions of the day in science, art, and literature.

There are both day and night schools. The former are for girls and young ladies, the latter for boys and young men. The male schools are in two sections - the department of science, and the department of art. The first admits about one thousand scholars during the term, and has classes in algebra, geometry, trigonometry, analytical and descriptive geometry, differential and integral calculus, elementary mechanics, natural philosophy, engineering, astronomy, elementary and analytical chemistry, geology, mechanical drawing, oratory and debate.

The art school admits over 1200 pupils during the term, and teaches them drawing in perspective, mechanical and architectural drawing, drawing from the cast, form drawing, industrial drawing, free-hand drawing and modeling in clay. The students join whatever classes they please, choosing those, of course, which will best fit them for the calling which they expect to follow. Some of them cannot afford the time necessary for the complete course, and the personnel of the classes changes considerably before the school year is over. Nearly all the pupils work at their trades during the day - and attend the schools at night. The hours are from half-past seven to half-past nine, and every class-room is occupied every evening. The students must be over fifteen years of age and have a good rudimentary education in reading, writing and arithmetic. The majority are lads of from eighteen to twenty, serving their time in workshop or office, but it is a common sight to see a middle-aged man standing by the side of a boy of seventeen.

Most of those in the scientific classes are embryo machinists, designers, artistic woodworkers, stone cutters, jewelers, painters, and workers in metals. As nearly all of them are obliged to work at their trades during the day, the pupils find a nightly attendance at school, too confining, and that is one reason why the classes are not identically the same at the close of the term as at the beginning. The lads are generally bright, ambitious and industrious, and, beginning with the school year in October, they want to study everything. They join all the classes and come every night, but after a few months they have undertaken too much, and allow some of the studies to drop, devoting themselves to others and averaging about four nights a week at school. Stationery, materials required in the chemical and modeling classes, etc., are furnished free, and textbooks are sold at cost price. The classes in oratory and debate are the largest, and next come algebra, geometry, and elementary chemistry. It is considered by Professor Plympton, the director of the night schools and professor of philosophy, mechanism and astronomy, that a full course of mathematics is a necessary preliminary to any thorough scientific study. Very few have come to the schools prepared with elementary mathematics for the study of practical engineering and mechanics. "It is to be regretted," says Professor Plympton, "that very few students can remain to pursue the whole course of scientific studies which entitles them to the medal and diploma. But nothing less than such a course can enable a man to achieve the highest sphere of usefulness in the ranks of modern industry. Certificates of proficiency are, however, given to those who have attended the class on any particular subject and passed a satisfactory examination." The lectures on natural philosophy, chemistry, English literature, elocution and rhetoric are attended by many who do not belong to the classes."

The male classes in the art schools are for the most part made up of apprentices in architects' offices, and of designers of tiles, wall papers, oilcloths, carriage painters and makers, mechanical sculptors, and of kindred trades where artistic workmanship is called for. There is no other school in New York where facilities of this sort are furnished free. The Society of Mechanics and Tradesmen gives free lectures to artisans on certain branches occasionally, but they do not pretend to the scope and thoroughness of the Cooper Union courses. The largest classes in the art department are in free-hand drawing, and in mechanical, architectural and industrial drawing. All the lessons are practical, and bearing on the employments in which the arts of design and

drawing are principal or accessory occupations. But if the pupil shows a talent for high art, and has the leisure and means to pursue it, he is recommended to other schools in this city established for the special instruction of professional artists.

To provide honorable and useful employment for women, is one of the problems of civilization. The necessity for self-support is as imperative to many women as to men, and skilled employments of some kinds are better adapted for women than for men. Nothing seems to supply this want so well as the industrial art schools of Cooper Union.

The art school for women is open every day from nine to one. Mrs. Susan H. Carter is the principal. There are about eight hundred pupils, and every room is crowded. The course of instruction includes all that is taught in the male art schools, and much more. Many of the graduates find places as teachers of drawing, painting, and so on, and others become designers for carpets, oil cloths, wallpapers, tiles, etc. Mr. R. Swain Gifford is the instructor in painting to graduates from the drawing classes.

The school is divided into five departments - drawing, painting, photography, wood engraving, and normal teaching. The drawing and painting school is conducted on a high plane of skill and taste, and has furnished many teachers in these departments. It is the purpose of the instruction in the art departments, to unite the two instrumentalities in the productions of art - both designing and careful execution. Invention is specially promoted by the lectures on art which the pupils receive, the instruction in perspective drawing, and especially the lectures and instruction given to the normal class for the preparation of teachers of drawing in private and public schools. It is the purpose of the trustees to extend the instruction in the schools of art more into the departments of invention and design, as answering a demand most truly American, where the inventive faculties are more active than in any part of the world.

It is worthy of note that the purpose of giving such instruction in practical art and applied sciences as will put an independent employment in the hands of every student, is in many instances commenced while the pupil is still under instruction in the institution. This is especially the case in the art school for women. The amount, reported as earned for themselves by pupils in the different departments of the women's art school last year, was \$28,932. [Ed. note: Compare to the annual cost of running the school: \$50,000.]

There is an afternoon pay class for amateurs. For the establishment of this class there was a great demand. It meets in the afternoon, and does not trench upon the hours of the free classes. Said Mrs. Carter in her last report:

Besides paying Mr. Gifford's salary from the proceeds of the afternoon class, I have been able to hire models constantly for the free-hand morning class, thus pushing the drawing of the school as far as portraiture, which has added thirty women more to the school. This class has been taught by Mr. Wyatt Eaton, Mr. J. Alden Weir, and Mr. Douglas Volk, and has raised the artistic reputation of the school till it is considered among the best in the country. The necessity for a china-painting class, soon began to be felt, and for a small fee, much less than would suffice in any studio where the expense of rent, etc., must be defrayed, more than ninety women have annually this profitable and interesting branch.

The practical results for the pupils of the art school ten years ago were comparatively insignificant. Some ladies went into art employments, and in the engraving class its pupils and all former graduates earned \$2285. This year the pupils now working in that class report \$4122, and our total report of money earned in the school by present pupils and last season's graduates, is \$29,033.57, against a total of \$4000 in 1872.

There are some forty ladies in the engraving class. The advanced pupils do clever work, and are employed on the *Century* magazine and other publications.

There are sixty or more young ladies who study telegraphing. The Western Union Telegraph Company has so far interested itself in this school, as to pay a teacher who trains the pupils in the thorough methods of that Company. It can thus draw competent operators for its offices from this school, and it has provided a large proportion of the graduates of this school, in times past, with employment on its lines, although it is under no special obligation to provide a place for any.

The last thing Mr. Cooper did before he died was to purchase ten typewriters. Instruction in their use has been added to the women's schools, and it has been found a very useful adjunct. Work can easily be procured for girls who understand this process of copying.

The last report of the curator says, concerning the general work of the institution:

Within a few years, and largely due to the influence of the Cooper Union, technical schools and systematic instruction in skilled forms of labor, have been established in several large cities. The diffusion of wealth and intelligence among those called the operative classes, as distinguished from the professional, renders their demand upon the public wealth for educational facilities, more and more imperative; and nothing can satisfy this demand short of engrafting upon the common-school system the methods of the industrial and technical school. The Cooper Union and smaller institutions of a similar kind, are leading the way and inaugurating the methods, for a great system of instruction specially adapted to the wants of the industrialized and skilled operative classes that form much the largest part of the population of those countries.

The pupils who leave the schools with some proof of proficiency demonstrate the help which such instruction is to them, by the readiness with which they get employment. There is often a call, in advance, upon the principals of the scientific and art departments, for men or women thought competent to teach, or to conduct the different employments which they are taught here.

In summing up this brief view of the Cooper Union, the thoughtful mind will reflect on the fact that, with a sum of money less than the annual expenditure of many a wealthy family in this city, the Cooper Union counts its yearly beneficiaries by the thousands. This institution bestows its charity in the best form - that of promoting self-dependence and intellectual training for the work of life.

[Ed. note: This reflects on the dictum that the highest form of charity is not to give a man a fish but to teach a man to fish.]

From: Life and Character of Peter Cooper, Charles Edwards Lester, <<http://tinyurl.com/c3p7ehl>>

See also:

- Recollections of Peter Cooper, Susan N. Carter, <<http://64.62.200.70/PERIODICAL/PDF/Century-1883dec/56-64/>>
- Peter Cooper, Rossiter W. Raymond, <<http://www.gutenberg.org/files/26498/26498-h/26498-h.htm>>
- The Old South Leaflets, Abram S. Hewitt, <<http://tinyurl.com/cqc65fn>>
- The Cooper Union for the Advancement of Science and Art, Historic American Engineering Record, Office of Archeology and Historic Preservation, National Park Service, <<http://lcweb2.loc.gov/pnp/habshaer/ny/ny0300/ny0359/data/ny0359data.pdf>>
- Making Millions and Making A Difference: What We Can Learn from Peter Cooper, Robert Q. Topper, <[http://engfac.cooper.edu/pages/topper/uploads/peter\\_cooper\\_lect\\_wbib&ed\\_Final.pdf](http://engfac.cooper.edu/pages/topper/uploads/peter_cooper_lect_wbib&ed_Final.pdf)>
- On Amateurs and Access, Sangamithra Iyer, <<http://sangamithra.wordpress.com/2012/04/07/on-amateurs-and-access/>>