

# Pioneers of Modern Education

1600—1700

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## PREFACE.

TO the objection that the current century is the twentieth, a writer who craves attention to a book on seventeenth-century education may very fairly reply that in his field at least there is no such incongruity between the two periods as the objection would insinuate. He might, it is true, either allege the general truth that the study of "origins" is often most fruitful in practical results, or he might base himself upon the particular assertion that the two centuries share in a peculiar manner certain great tendencies of thought and action. But his best defence lies in pointing to the relationship, direct and unmistakeable, between the theory and practice of the modern school-room and the changes which were suggested or actually brought about by men who laboured in the earlier time. Not a few of the conceptions, small as well as great, which we are apt to consider characteristic of our own, or of the generation or two immediately senior to us, are but re-statements of principles and devices which took their earliest modern shape in that same seventeenth century.

For example, the wide recognition of Education as a social force, and the consequent expediency of state-provided systems of instruction, universal and compulsory, are commonly set down as nineteenth-century convictions. The attempt to include within the ordinary school-curriculum those branches of study which have been more especially advanced by scien-

tific research is often spoken of as inspired solely by the progress which the Experimental Sciences have recently achieved ; and, similarly, the spirit of an age pre-eminently commercial is credited with the introduction of modern languages into the same curriculum. Again, from different quarters comes the demand for a closer association between the tasks of the school-room and the every-day life outside its walls, that there may no longer exist "*la disconvenance entre l'école et la vie*" against which Taine protested. Amongst teachers themselves there is to-day an evident desire to attack the problems of method from a base more or less scientific, and, particularly, through a more discriminating study of the mental powers of children. With these reforms it is usual to connect the names of Rousseau, Pestalozzi, Froebel, Herbart and others who flourished during the eighteenth and nineteenth centuries ; it is one purpose of this book to show how great was the share of the seventeenth century in formulating these and the like fundamental ideas of the pedagogy of our time.

The main theme is the introduction of "modern studies" into the school-course and the breaking-down of the monopoly vested, by force of circumstance and not always with express intention, in the ancient languages. Many causes, not all scholastic, conspired to overthrow that monopoly in the end ; the following pages endeavour to set out the three most influential causes of the more directly scholastic kind which came into play during the period under consideration. The most potent was undoubtedly the "New Philosophy," to use the co-temporary phrase designating the beginnings of modern inductive science. Even more immediately operative was the desire for a type of instruction especially suitable to the courtier, the soldier, the diplomatist and the man of affairs, a desire which called into being the "Academies," schools, or colleges, French in origin, but by no means confined to French soil. The third influence in modernizing the studies of the school-room has not attained that general recognition which

its importance deserves. During the last twenty years of the seventeenth century, movements in favour of popular education on the large scale took place in France, in Germany and in England; chiefly religious and moral in origin, they also reveal signs of the commercial and industrial motives which usually, in part, actuate proposals for educational change. The three movements attained different measures of success; but they made popular instruction possible at a later time and founded the traditional curriculum of the elementary school, while contributing to establish new studies in schools of a higher grade.

Of course, it is not asserted that the conception of State school-systems, etc., began *ab ovo* with Comenius and his contemporaries. The *Republic* of Plato alone is a sufficient confutation of such a thesis, were there no sign remaining of the world-wide educational activity of the Church. Moreover, while Plato was forgotten, or ignored, and Churchmen often took too restricted a view of what was educationally necessary, men contemporary, or almost so, with Comenius, anticipated him not only in the design of a popular organization of schools, but even in some of his projected reforms in both the matter and manner of instruction. Martin Luther, John Knox, Richard Mulcaster are names which readily occur to the mind. But the educational schemes of Luther and of Knox were not effectively realised in their own life-time, and Mulcaster, even to his fellow-countrymen, remained but a voice, and one not always listened to with pleasure.

Compared with these men, Comenius had two supreme advantages. He reached a much wider audience than did either Knox or Mulcaster, and, above all, he wrote in days when the educational system was ripe for reform and circumstances had begun to make reform possible. The publication of the *Advancement of Learning* and the *Novum Organum* gave a cogency to his pleas which had been wanting in the sixteenth century. The man's genius and character co-operated with

the state of affairs to make him in a very real sense the founder of modern pedagogy.

While much of the story gathers about the thought and activity of Comenius, there were also educational pioneers in England now forgotten, or, if not forgotten, remembered by reason of achievements in other fields. To these, and especially to Samuel Hartlib, a name which should be honoured by all friends of Education, some of the following chapters are devoted; it is hoped that excerpts from their writings, no longer generally accessible, will not unduly tax the reader's patience. They speak a language expressing modes of thought nearer akin to our own than those natural to a Pestalozzi, a Froebel, or a Herbart; and, expression apart, the characteristic "practicality" of these followers of Bacon ought to commend them to the national idiosyncrasy.

The book, however, aims at a wider survey than a purely English one; and in the foreign section the writer has tried to indicate the great services (too seldom even named in textbooks of educational history) which were rendered to the world by St Jean-Baptiste de la Salle. As a foil to the ideals of education or of instruction presented by the innovators, the actual practice of the seventeenth-century school-room, reformed and unreformed, is described on the authority of those who knew it at first hand. It is hoped that a full index, bibliography and tables of contents and of "dates" will increase the usefulness of the book to students of the history of Education.

*August 1, 1905.*

## TABLE OF DATES.

- 1599 The Jesuit *Ratio Studiorum* completed.  
The Collegium Mauritianum *f.* at Cassel.
- 1600 Gilbert's *De Magnete*.  
Bruno burned.  
? Hartlib *b.*
- 1601 English Poor Law.  
Tycho Brahe *d.*
- 1604 Canons of the English Church.
- 1605 Bacon's *Advancement of Learning*.  
Arndt's *True Christianity*.  
Beza *d.*
- 1608 Herbert of Cherbury abroad: till 1616.  
Microscope invented.
- 1609 Kepler's first two Laws of Planetary Motion.
- 1610 Telescope invented before this year.
- 1611 The Oratory of Jesus *f.* by de Bérulle.  
Authorised Version of the Bible completed.
- 1612 Brinsley's *Ludus Literarius*.  
Ratke's *Memorial* to the Diet at Frankfurt.  
Charterhouse School *f.*  
Births: Arnauld (*d.* 1694), Lancelot (*d.* 1695).
- 1614 Napier's *Mirifici Logarithmorum Canonis Descriptio*. (See  
1618.)  
Ratke at Augsбург.
- 1616 Galileo threatened for teaching the Copernican astronomy.  
Shakespeare *d.*

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- 1617 The Fruchtbringende Gesellschaft *f.* by Ludwig of Anhalt-Köthen, Moritz of Hesse and others.  
*Methodus Institutionis nova quadruplex* of Rhenius and others.
- 1618 Outbreak of the Thirty Years' War.  
 Ratke at Anhalt-Köthen.  
 Collegium Mauritanum reconstituted.  
 English translation of Napier's *Descriptio* (1614).
- 1619 Kepler's *Harmonice Mundi*: third Law announced.  
 Harvey makes known his theory of the circulation of the blood.
- 1620 Bacon's *Novum Organum*.  
 · Drebbel's Thermometer.  
 Simon Stevin *d.*
- 1621 Snell discovers the law of refraction of light.
- 1623 Bacon's *De Augmentis Scientiarum*.
- 1625 Nicole (*d.* 1695) *b.*
- 1626 Bacon *d.*
- 1627 Bacon's *New Atlantis* published.
- 1628-32 Comenius's *Didactica Magna*.  
 Hartlib comes to London from Elbing.  
 Harvey's *Exercitatio Anatomica de Motu Cordis*.
- 1630 Dury leaves Elbing.  
 Deaths: Harvey, Kepler.
- 1631 Comenius's *Janua Linguarum Reserata*.
- 1632 Locke *b.* (*d.* 1704).  
 Galileo before the Inquisition.
- 1635 Ratke *d.*  
 Spener *b.*  
 The *Académie Française f.*  
 Boston (New England) Latin School, proposed foundation of.
- 1636 Harvard founds his college for the clergy.
- 1637 Descartes' *Discourse on Method*.  
 Hartlib prints *Conatuum Comenianorum Praeludia*=Pro-dromus of 1639.
- 1638 Port-Royal education begins under Singlin and Lancelot.  
 The Oratorian Académie Royale de Juilly *f.*  
 Comenius publishes the *Conatuum Pansophicorum Dilucidatio* and begins a Latin version of the Great Didactic.

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- 1638 Busby provisionally appointed at Westminster (*v.* 1640).
- 1639 Horrocks observes the transit of Venus.
- 1640 Ernest, Duke of Saxe-Gotha.  
 Richelieu founds an Academy at Richelieu.  
 The Earl of Arundel (in the House of Lords) moots the institution of an academy.  
 Busby appointed Head Master of Westminster: holds office till death in 1695. (See 1638.)
- 1641 Hartlib and Dury: *Briefe Relation*, etc.  
 House of Commons resolves to employ Church property for "the Advancement of Learning and Piety" (June 15).  
 Comenius in London (Sep. 22 to June, 1642).  
 Hartlib: *Macaria*.  
 Andreas Reyher at the Gotha Gymnasium.  
 Salem Town's meeting decides to erect a Common School.
- 1642 Comenius and Hartlib: *A Reformation of Schooles*.  
 Duke Ernest and Reyher: *Schulmethodus*, followed by school-books.  
 The Seminary of St Sulpice *f.* by Olier.  
 Galileo *d.*
- 1643 Torricelli invents the Barometer.
- 1644 Charles at Oxford: Parliament orders the reform of Cambridge. Siege of York (April).  
 Milton: *Of Education* (June 5).  
 Marston Moor (July 2).  
 Evelyn in France.
- 1645 Meetings begin at Gresham College: whence Royal Society *f.*, 1662.
- 1646 The "Little Schools" of Port-Royal fully organized in Paris.  
 Dury: *Exercitation of Schooling*.
- 1647 Hartlib: *Considerations*, etc.
- 1648 Peace of Westphalia.  
 Petty: *The Advice of W. P.*, etc.  
 Hartlib: *A Continuation of Mr J. A. Comenius' School Endeavours*.  
 Cromwell suppresses the Welsh insurrection.  
 Death of the Jesuit, Calasanzio, founder of the Scuole Pie.  
*Nova Solyma*.



- 1649 Dury: *The Reformed School*.  
 Act "for the better Propagation and Preaching of the Gospel in Wales." Act devoting First-fruits and Tenth "to the Advancement of Learning and Piety." (First Parliamentary grant for Education.) Act establishing Commissioners of the New England Colonies. (Voluntary system.)
- 1650 Hartlib: *London's Charity Inlarged*.  
 Dury: *The Reformed Librarie Keeper*.  
 Sir B. Gerbier's Academy at Bethnal Green.  
 The General Court of Connecticut decides to institute a compulsory school-system.  
 Guericke invents the air-pump.  
 Descartes *d*.
- 1651 Hartlib: *An Essay for Advancement of Husbandry Learning*, etc.  
 Jean-Baptiste de la Salle *b. (d. 1719)*.
- 1652-56 Golden days of the Port-Royal Schools.
- 1653 Barebones' Parliament appoints a Committee for the Advancement of Learning.
- 1654 Hartlib: *A True and Readie Way to Learne the Latine Tongue*.  
 Pascal enters Port-Royal.
- 1656 Harrington: *Oceana*.
- 1657 Comenius: *Opera Didactica Omnia* (the Amsterdam folio).  
 Cromwell's letters patent for a University at Durham.  
 Adrien Nyel begins work at Rouen.
- 1658 Comenius: *Orbis Sensualium Pictus*.
- 1659 Hoole's translation of the *Orbis S. Pictus*.
- 1660 Hoole: *A New Discovery of the Old Art of Teaching Schoole*.  
 Arnauld and Lancelot: *General and Systematic Grammar*.
- 1660-7 Arnauld: *New Elements of Geometry*.
- 1661 Louis XIV closes the Little Schools of Port-Royal.  
 Lawrence founds a Charity School at Lambeth.
- 1662 Royal Society *f*.  
 Act of Uniformity.  
 Arnauld and Nicole: Port-Royal *Logic*.
- 1663 Francke *b. (d. 1727)*.

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- 1666 Dénia begins a public school-system and trains teachers at Lyons (1666-79).
  - 1667 Paris Observatory *f.*
  - 1670 The Sisters of the Holy Child Jesus, a Rheims congregation, *f.*
  - 1671 Comenius *d.* (*b.* 1592).  
Westminster vestry teaches parish children.  
Nicole: *Treatise on the Education of a Prince.*
  - 1672 Thos. Gouge in S. Wales.
  - 1673 Reyher *d.* at Gotha.
  - 1675 Duke Ernest *d.*  
Greenwich Observatory *f.*
  - 1676 Francke at the Gotha Gymnasium.
  - 1679 Nyel goes to Rheims.  
Port-Royal girls' school dispersed.
  - 1680 Dury *d.* (*b.* 1596).
  - 1683 Foubert's Academy, London.
  - 1684 Foundation of the Institute of the Brothers of the Christian Schools: Seminary, or training college, opened at Rheims.
  - 1686 Madame de Maintenon founds Saint Cyr.
  - 1687 Newton: *Principia.*  
Fénelon: *Sur l'éducation de filles.*  
Deaths: Petty, Nyel.
  - 1688 De la Salle and the Institute go to Paris.  
Thomasius lectures at Leipzig in *German.*
  - 1689 Francke and Spener at Dresden.
  - 1690 Locke: *Essay concerning Human Understanding.*  
The Institute has 1000 pupils in four Parisian schools.
  - 1691 Francke, Professor of Greek and Oriental Languages at Halle.
  - 1693 Locke: *Some Thoughts concerning Education.*
  - 1694 The Friedrich University of Halle *f.*  
Francke opens the Poor School, Bürger-schule and Pädagogium.  
Mary Astell: *Serious Proposal to the Ladies.*
  - 1695 De la Salle: *La Conduite des Écoles* (about this time).  
Francke's Orphanage.
  - 1696 Seminarium Praeceptorum at Halle.

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- 1696 John Bellers: *For Raising a Colledge of Industry of all Useful Trades*, etc.
- 1697 Locke: *Conduct of the Understanding*: Memorandum on *Working Schools*.  
 Francke's Latin School.  
 Col. Colchester's school at Westbury on Severn.
- 1698 Francke Professor of Divinity at Halle.
- 1699 Society for the Promotion of Christian Knowledge f.  
 L'École Dominicale of St Sulpice opened.  
 The Institute of the Brothers, etc. at Chartres.
- 1700 The Elector Frederick becomes King of Prussia.  
 Yale bequeaths his library and fortune to the college founded at Newhaven, Conn.
- 1702 De la Salle: Memorandum on teaching reading in French, *i.e.* the vernacular, before Latin.  
 Francke: *Short and Simple Instruction*.
- 1704 First Charity School Sermon: about 2000 children then in London Charity Schools.  
 Locke *d.*
- 1705-9 The Institute goes to St Yon, Rouen.  
 First French higher primary school and first reformatory.
- 1705 Semler proposes a Realschule at Halle.
- 1707 Seminarium Selectum Praeceptorum at Halle.
- 1709 Scotland and New England adopt the system of Charity Schools.  
 Francke's Girls' High School.  
 Port-Royal des Champs demolished.
- 1711 Twenty-five schools in France served by de la Salle's Institute.  
 "Payment by Results" introduced into the Charity Schools about this date.
- 1712 Jean Jacques Rousseau born.

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