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UNIVERSITY OF LOUISVILLE

COEDUCATION IN THE SECONDARY SCHOOLS

A Professional Paper

Submitted to the Faculty

Of the Graduate School of the University of Louisville

In Partial Fulfillment of the

Requirements for the Degree

Of Master in Education

Department of Education

by

Agnes Borgman

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COEDUCATION IN THE SECONDARY SCHOOLS

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INTRODUCTION

From time to time the question of COEDUCATION in the secondary schools in the city of Louisville develops into a political argument. Those of us who are intimately connected with these schools should be able to discuss the problem intelligently. Most of us have opinions. Are these based on research or are they the prejudiced ideas of an uninformed group? This paper attempts to present the practices, the rationalizations, and the judgments of educators over the world.

SECTION I

**DEVELOPMENT OF GIRLS' SECONDARY EDUCATION
IN EUROPE**

SECTION I

DEVELOPMENT OF GIRLS' SECONDARY EDUCATION IN EUROPE

After subjection for centuries, women have risen to a position of relative equality in certain countries. According to most historians, back of this transition lay fundamental economic changes such as the rise of a large prosperous middle class and variations in modes of manufacture brought about by the Industrial Revolution, and philosophies of expanding liberalism which would not countenance the subjection of one half of mankind. The changes in female education developed simultaneously with the women's movement.

These changes were gradual and not abrupt. They must be traced to provide a suitable background for any study of coeducation. Our educational systems stem from the earlier European institutions. A study of these discloses many interesting facts.

Little has been said of any education for girls prior to the middle ages in France, and little can be said of the quality of their education during these times. In the conventual schools, the curriculum consisted of reading, writing, copying of manuscripts, weaving, spinning, and needle work. These schools throughout the middle ages attracted a superior class of women. As early as the fourteenth century we find expressed in the writing of the times an interest in state supported education for both boys and girls. Luther's aims and ideals of education

were ahead of his time.

"His aim was to make good citizens as well as good men. He appreciated the magnitude of the undertaking and said it was the task of the state to provide and maintain education for everyone - rich and poor, high and low, boys and girls, - and to compel attendance upon instruction." (1)

Rabelais employed his facile pen to express his criticism of the evils of the day and to suggest in a suitable way the reforms needed. In the Pantagruel, (2) the Abbey of Thélème is described as a school where boys and girls lived in free association. Thus, we read of a suggestion of coeducation as early as the fifteenth century. Of course, the idea was an amusing one and was accepted as such. It is startling, however, to find this idea expressed even in a satirical work.

In 1686, Louis XIV shows his concern for girls by establishing Saint Cyr to be supported by the State. During the French Revolution, education became a political issue. Under the regime of Napoleon a large number of private schools sprang up. He showed his enthusiasm for the training of girls by establishing various schools with government support. The Rev. J. M. Thompson of Magdalen College, Oxford, Oxford, England, translated from Napoleon's letters the following to give some idea of a girls' school in France in 1807.

"The buildings at Écouen ought to be as handsome, and the curriculum as simple as possible. Beware of following the example of the institution at Saint Cyr, where vast sums were spent, and the girls abominably educated.

"The first problem that needs your

1. Bevier, Isabel, Home Economics in Education, Philadelphia: J. B. Lippincott, 1924. p. 42.

2. Rabelais, F., Pantagruel, New York: Modern Library, 1928.

attention is the employment and distribution of time. What are the girls at Écouen going to be taught? You must begin with religion with all its strictness. Don't allow any compromise on this point. Religion is an all important matter in a public school for girls. Whatever people may say, it is a mother's surest safeguard, and a husband's. What we ask of education is not that girls should think, but that they should believe. The weakness of women's brains, the instability of their ideas, the place they will fill in society, their need for perpetual resignation and for an easy and generous type of charity--all this can only be met by religion of a gentle and charitable kind. I did not lay special stress on religious observances at Fontainebleau, and in the lycées I only prescribed the necessary minimum. At Écouen it must be entirely different. Nearly all the exact knowledge taught there must be that of the Gospel. I want the place to produce, not women of charm but women of virtue; they must be attractive because they have high principles and warm hearts, not on account of their wits or their power to amuse. We must therefore have, as headmaster at Écouen, a man of ability, good character, and a sufficient age; and every day the pupils must have regular prayers, hear mass, and learn the catechism. This is the part of their education with which most care must be taken.

"In addition the girls must be taught writing, arithmetic, and elementary French, so that they may know how to spell; and they ought to learn a little history and geography; but care must be taken not to let them see any Latin, or other foreign languages. The older girls can be taught a little botany and be taken through an easy course in physics or natural history. But that too has certain embarrassments. The teaching of physics must be limited to what is necessary to prevent gross ignorance and silly superstitions, and must confine itself to the facts, and not indulge in reasoning which directly or indirectly touches on first causes.

"You must go into the question whether all girls of a certain class should have

a dress allowance. They should then practice economy, calculate prices, and keep their own accounts.

"But the main thing is to keep them all occupied, for three quarters of the year, working with their hands. They must learn to make stockings, shirts, and embroidery, and to do all kinds of women's work. These young girls should be regarded as belonging to provincial families with incomes of 15-18,000 livres, and as unable to bring their husbands a dowry of more than 12-15,000 francs; and they should be treated accordingly. That is why one realizes that manual labour in the home cannot be ignored.

"I don't know whether it is possible to give them some idea of medicine and pharmacology, at any rate that kind of medical knowledge commonly required for nursing invalids. It would be a good thing, too, if they knew something about the work done in the housekeeper's room. I should like every girl who leaves Écouen, and finds herself at the head of a small household, to know how to make her own frocks, mend her husband's clothes, make layettes for her babies, provide her little family with such occasional delicacies as can be afforded by a provincial housekeeper, nurse her husband and children when they are ill, and know in these matters, because she has been taught it beforehand, what invalids have learned by experience. All this is so simple and obvious that it does not require much consideration ..

.....
 ... "The girls ought to furnish their own rooms, make their own chemises, stockings, and frocks, and do their own hair. I attach a great importance to all this. I want to make these young women into useful women and I am sure that in that way I shall make them attractive wives. I don't want to aim at making them attractive; the only result would be to turn them into mistresses. Making your own clothes teaches you how to hold yourself; afterward it becomes a habit to do it gracefully.

"Dancing is necessary for the health of the pupils; but it must be cheerful,

Not the kind they indulge in at the opera.
They must have music, too, but only vocal
music

.....
..."This is a matter in which we must risk
a little ridicule. I am not bringing up
shop assistants, or chambermaids, or
housekeepers, but wives suitable for poor
and humble homes. Among the poor it is
the mother who looks after the whole house.

"With the single exception of the
head-master, all men must be excluded
from the school. No man must ever enter
within its walls, under any pretext
whatever. Even the gardening must be
done by women. My intention is that in
this respect, the establishment should
be as strictly ruled as a convent. The
Headmistress, herself must not be al-
lowed to receive men, except in the
parlour; and if it is impossible to
exclude the girls' relations in cases
of serious illness, at least they must
only be admitted by special permission
of the Grand Chancellor of the Legion
of Honour.

"I have no time to write more about
this establishment. It is more original
than Compiègne, as I view it; and Compiègne
is unlike any of its kind before.

"I need only say that the only women
employed in the school must be elderly
spinsters or widows without children;
that they must be entirely under the
control of the Headmistress; and that
they must never receive men or go out
side the walls of the school.

"It would no doubt be equally superfluous
to remark that nothing is worse, or
more open to censure, than the idea of
letting young girls act plays, or
stimulating rivalry among them by giv-
ing school prizes. It is good for men,
who have to make speeches, and who hav-
ing to master so many subjects, need the
support and stimulus of competition.
But in the case of girls, competition
should be banned; we don't want to rouse
their passions, or to give play to the
vanity which is one of the liveliest
instincts of their sex. Light punish-
ments, and a word of praise from the
Headmistress to those who do well, seems
to me all that is needed. I can't think

It has a good effect to distinguish the girls by different colored ribbons, unless the object is merely to classify them by age; otherwise it might establish a kind of superiority among them." (1)

This letter of Napoleon gives us an excellent picture of schools of France in the early nineteenth century. By 1828 schools for girls were placed under the same supervision as those of boys. In 1880 a bill was enacted to provide for secondary schools for girls by the state. Up unto the present time, however, there has been no widespread movement for coeducation. There are such schools where localities cannot support separate schools for boys and for girls.

In the other countries of Europe, education follows the French pattern. In Germany the schools for girls supported by the state were established as early as 1811. By 1840 there were fifty-six of these, by 1860 one hundred and three. Since then there has been a steady increase. In England private academies for girls sprang up in the eighteenth century. In 1872 the girls' Public School Trust by the National Union for the Improvement of Education for Women of All Classes was established to provide education corresponding to that in the public school for boys. In 1902 the Education Act made possible the establishment of institutions of secondary learning at public expense. There are two schools in the whole of Europe which have earned distinction in the realm of coeducation - Paul Geheeb's school in Odenwald in pre-Nazi Germany, now continued as the École d'Humanité in Switzerland, and Bedales in Derbyshire, England. Most of the secondary schools both in

1. Thompson, J. M., Magdalen College, Oxford, Oxford, Eng. Translation from the Official Correspondence of Napoleon, Vol. XV. 12585, 1932.

Germany and England are segregated institutions.

The situation in Soviet Russia is of great interest. W. C. Bagley in the September 2, 1944 issue of School and Society brought to the attention of the American public an article of Fay King in the Journal of Education, London, of August 1944. His exact quotation follows.

"After twenty five years of education everybody in the Soviet Union accepts the fact that women are as important as men. Equality of sexes is no longer questioned. Soviet educationalists have noted the effects of coeducation and have decided on radical changes---separate schools for boys and girls between twelve and eighteen.

"They maintain that life will be richer by the fuller development of natural feminine and masculine qualities made possible by separate adolescent schooling.

"It is understood that whatsoever careers girls may choose, they must through their future motherhood have more to do with children than men have, and they need special training for the important job of wifehood and motherhood.

"Girls must be taught about their bodies, about pregnancy and this cannot be satisfactorily given in mixed classes of adolescents. The same physical training is not suitable.

"Another factor that has influenced this change in educational policy is the different rate of development of boys and girls. It is well known that boys grow more slowly between the ages of ten and thirteen, while girls go through a period of very rapid development at this time. Between fourteen and seventeen boys make up for lost time and develop at a great rate while girls mark time between these years.

"The physical changes that follow puberty naturally have their psychological reactions---and it is reasoned it is not easy to make the necessary allowances for this is mixed classes." (1)

1. King, Fay, "Why Coeducational Middle Schools Are Condemned in the Soviet Union," London: Journal of Education, 76:400, August 1944.

Dr. Bagley in commenting on this quotation suggested that Russia may be showing us a better plan.(1)

1. Bagley, W. C., "Why Has Coeducation Been Abandoned in the Soviets Middle Schools?" School and Society, 60:151-152, September 2, 1944.

SECTION II

**DEVELOPMENT OF GIRLS' SECONDARY EDUCATION
IN THE UNITED STATES**

SECTION II

DEVELOPMENT OF GIRLS' SECONDARY EDUCATION

IN THE UNITED STATES

The people who came to America brought with them the customs of their mother country. The types of schools transferred from Europe to the colonies included the aristocratic, parochial, and governmental types. The fact that Virginia had no free schools is verified by Governor Berkeley's statement:

"I thank God there are no free schools and I hope we shall not have them these hundred years, for learning has brought disobedience and heresy and sects into the world." (1)

Instead of free schools, records show that aristocratic types were maintained in Virginia. In New England, the colonists soon recognized that voluntary efforts would not be sufficient to provide essential education, and as a result two laws were passed that have been the basis for all American education. The Massachusetts law of 1642 ordered all people to be taught to read; the law of 1647 provided that a teacher be paid by the people. The law was mandatory and a fine was imposed upon those communities that failed to meet its requirements which were an elementary school for fifty families and a grammar school for a hundred families. The long established practice of interpreting the word people to mean men only prevailed. The education of women waited

1. Graves, Frank P., Student's History of Education, New York: Macmillan Co., 1936. p. 192.

like much else that was beyond the daily necessities. In the record of two hundred towns studied by Superintendent Small there were less than a dozen grammar schools for girls during the first century of colonial history. Benjamin Mudge says:

"In all my school days which ended in 1801, I never saw but three females in the public schools, and they were there only in the afternoon to learn to write." (1)

Boston in 1789 established a double-headed school. Both sexes used the school, but at different hours. Public schools for girls were very rare during the eighteenth century while private and finishing schools were not uncommon. Isabel Bevier describes the instruction in an amusing way.

"The teachers were men and when the girls went from the dame schools, where they were taught sewing, knitting, and the improvement in manners, they naturally took some of their handiwork with them. It is reported that one schoolmaster, from whom a pupil sought help with her knitting, advised her to narrow and soon brought the stocking to a point, while another followed the instructions to widen, until her stocking reached the size of a meal bag." (2)

After the establishment of the United States of America, political and social arguments were expressed in behalf of women's education. By 1820 publically supported education for girls was being considered. Isabel Bevier again reports the organization of the Boston High School for girls by quoting from the Report of the United States Commissioner of Education.

1. Small, Walter, Early New England Schools, p. 279

2. Bevier, Isabel, Home Economics In Education, Philadelphia: J. B. Lippincott, 1924. p. 73.

"On September 25, 1825, the city council appropriated \$2000 for a high school for girls. The school was instituted January 13, 1825, and before the end of the second year had become so popular, the applicants for admission were so numerous, so many parents were disappointed that the children were not received, the demand for better accommodations involved such additional expenditures that the school committee, under the lead of the mayor, Josiah Quincy, met the emergency by abolishing the school and pronouncing it a failure. For a period of twenty-three years no attempt was made to revive the subject in either branch of the city council." (1)

After a generation and a half of experimental effort, the high schools in the United States came to offer equal opportunities for boys and girls. The aims of these schools were threefold: first, to extend the range of girls' education; second, to increase social usefulness; third, to prepare girls for teaching in the lower schools. Since expense was a serious obstacle, the monitorial system was frequently employed.

Thomas Woody gives a list of high schools for girls and the dates they were established. (2)

Boston Girls' High School	1826
New York Girls' High School	1827
Philadelphia Girls' High School	1840
Cincinnati High School	1847
Louisville Girls' High School	1857
Dubuque High School	1858
San Francisco High School	1858
St. Paul High School	1865
Savannah High School	1866
St. Louis High School	1867
Chicago High School	1867
Portland High School	1872
Richmond High School	1872

1. Bevier, Isabel, Home Economics In Education, Philadelphia: J. B. Lippincott, 1924. p. 76

2. Woody, Thomas, A History of Women's Education In The United States, New York: The Science Press, 1929. p. 566.

Denver High School	1873
Trenton High School	1874
Salt Lake City High School	1890

The term coeducation came into use in America only in the last seventy-five years, but the practice was much older than the name. In the late eighteenth and the early nineteenth century several academies were famous for the fact that they admitted both male and female students. Leicester Academy (1793), Bradford (1803), and the Friends Academy at New Bedford (1812) were in this category. Schools of this nature were undoubtedly less numerous than the separate institutions. The first secondary public schools were like the greater number of academies - separate institutions. When the public high schools, however, were once under way, they soon changed and became chiefly coeducational. The high school in Cleveland was opened in 1846 for boys; a year later girls were admitted. According to statistics, in 1850 there were eleven coeducational high schools and by 1870 there were one hundred and sixty public high schools, most of which were coeducational. In 1900, reports received from 6,005 public high schools showed 5,933 (98 per cent) mixed. In these 93.6 per cent of the pupils attending high school were enrolled. In 1910, 34 separate public high schools for boys were reported, and 26 for girls, in a total of 10,213; in 1920 there were 78 divided for the sexes in a total of 14,326 public high schools reported. (1) Another bulletin gives the following statistics. (2)

1. Biennial Survey of Education in the United States, Washington: Government Printing Office, 1918-1920, Bul. 1923, No. 29, 547.

2. Biennial Survey of Education in the United States, Washington, D.C.: Government Printing Office, Chapter 5, Table 1, pp. 16-17., 1937.

	1926	1930	1934	1938
High schools for boys	64	70	74	87
High schools for girls	59	59	59	76
Total no. of schools reporting	17,710	22,237	23,614	25,467
Per cent that segregated schools are of the total	0.69	0.58	0.56	0.55

These records show that coeducation has become the rule in the United States. This practice has undoubtedly raised the standards of education for girls. Coeducation was not adopted after careful experimentation, but it developed largely because the common judgments of schoolmen were overwhelmingly in its favor.

SECTION III

STUDIES PERTINENT TO COEDUCATION

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STUDIES PERTINENT TO COEDUCATION

In general coeducation was an experiment which proved very practical and popular in the United States. A few objective checks on the results of coeducation have been made. More recently, studies of sex differences have been carried out.

One of the earliest attempts to evaluate coeducation was conducted in Chicago at Englewood High School. In 1906, an entering class of one hundred and fifty pupils was segregated into classes for boys and classes for girls, but continued the mixed school save in recitation. Each teacher had a class for boys and a class for girls in his subject, in order that he might compare results of achievement. After six months parents were interviewed to see whether or not in the opinion of the parents segregation had benefited the students. They were also requested to express their desires for the next term. Ninety per cent approved the new plan and wished to have it continued. The same procedure was followed for the next six months at the end of which the parents were again interviewed. When eighty-five per cent favored segregation, the system was extended to the second year class. In general it was judged by both parents and teachers to have improved boys' scholarship, and to have been instrumental in keeping more boys in school the second and third years. According to parents and faculty the boys did better under men teachers, and the leading traits became more marked and hence better adapted to each. Such grouping, they felt, made grading more

perfect, discipline easier, and work better suited to each sex. Thomas

Woody says of this experiment:

"The judgments were all favorable to segregation; they were, however, just another set of judgments, though more reliable for having been the result over a four-year period, and because they represented a consensus of opinion." (1)

It is the general opinion that most of the people at Englewood had very firm convictions on the subject before the experiment was started.

One of the beliefs that tended to block the complete acceptance of coeducation, the notion that sex determined mental and physical capacity, could be and was subjected to statistical study. Differences in physical and mental traits have been observed, tested, and charted by doctors, statisticians, and educators over the whole country.

Biological research shows that growth and development of a child is an orderly sequence with a wide diversity in individuals. It suffices to note a general trend. From about 11.5 to 14.5 years of age girls apparently exceed boys in height and weight although boys exceed girls at other ages. Girls begin to mature a year or two before the boys do. The male type tends from adolescence to be larger and stronger in body build. Organs such as the heart are correspondingly larger in the male than in the female.

Most of the existing information on human growth is based on cross-sectional data. An investigator weighs and measures a large number of girls and boys of the same age. From these weights he determines the average weight and measurements for that age level. A great variability will be found particularly in adolescent children in such

1. Woody, Thomas, Women's Education in the United States, New York: The Science Press, 1929. p. 230.

a heterogeneous population as we find in America.

Motor capacities are correlated with body size. In high school physical work and competitive play, involving exertion and endurance, should not be arranged for participation by both sexes.

Another type of research relating to sex differences considers social aspects. Interests of all kinds are colored by sex awareness and by influences rooted in adult patterns. Boys identify themselves with their fathers and tend to imitate them, while girls identify themselves with their mothers and look forward to their womanhood. Boys prefer active, vigorous play; girls are more conservative in their recreation. Girls are more often concerned with domestic things, and display greater interest in art, literature, music, personal and social welfare, and human relationships. Boys care for science, machinery, out-of-door pursuits, adventure, political interests, and business dealings. Each sex expresses most interest in the pursuits characteristic of its members; the occupational interest follows trends characteristic of the sex to which it belongs. Interests contrasts persist until and throughout maturity.

The most respected investigators in the field of social aspects are L. M. Terman, Catherine Miles, P. M. Symonds, H. C. Lehman and P. A. Witty. The conclusions of their studies are based on responses from large numbers of individuals from preadolescence to old age including representative, average, and special groups of both sexes. In all research, the details may vary but the trends are in harmony with those outlined. These differences should be noted and considered by teachers of all grades.

Another branch of research relative to sex differences deals with intellectual aspects including the variability of intelligence, special capacities, progress, and accomplishments of both sexes.

One study termed the "Relative Difficulty of High School Subjects" (1) developed a difficulty scale somewhat analogous to the scale of hardness in minerals. A scale was constructed to consist of thirty-one descriptive statements which received their scale ratings from combined rankings. The statements described degrees of difficulty. They varied from "A dumb bell could pass this course." to "If my life depended on it." The pupils were asked to mark one or more statements which they thought best suited the subjects. The five subjects hardest for girls were physics, geometry, chemistry, bookkeeping, and algebra. The boys ranked English 2, Latin 2, English 1, English 4, and shorthand 1 as the five hardest. It is of interest to note that science and mathematics were hardest for girls while the boys marked the subjects involving languages.

Glenn R. Peace constructed valid tests to check the sex differences in algebraic ability.(2) After comparing scores the following data were compiled. The boys made 2096 more errors per 100 pupils than the girls made. The average errors for boys was 163.7, the average errors for girls was 142.81. Mr. Peace felt the test underestimated the girls' ability.

Mr. Carl F. Hanske of Emrich Training High School of Indianapolis

1. Osborn, L. G., "Relative Difficulty of Subjects," School Review, 47: 95-100, February, 1939.

2. Peace, Glenn R., "Sex Differences in Algebra Ability," Journal of Educational Psychology, 21: 712-714, December, 1930.

olis., Ind., conducted an experiment to determine sex differences in high school chemistry.⁽¹⁾ The Terman Group mental ability test was given to the students. The following chart is a record of the results.

	125 boys	105 girls
U. Q. Score	170	161
Median Score	141	141
I. Q. Score	116	123

Of the 125 boys, 84 had had previous science; of the 105 girls, 35 had had previous science training. A series of tests were constructed and checked for reliability; these were administered to the students. In 15 of the 18 tests boys were found superior to girls. The differences in 6 of the tests were significant. Mr. Hanske felt the previous training was a vital factor in the result of the test.

Studies such as those that have been described have been made in all fields. Some investigators find higher scores for boys and others find higher ones for girls. Mr. C. N. Allen reviewed the whole field of such research. Tests have been made to determine the superiority of one sex over another in intelligence, specific subjects, logic, intuition, handwriting, personality, suggestibility, variability, and memory. T. A. Langlie and D. G. Patterson found boys to have higher scores than girls in intelligence ratings, while F. L. Goodenough, G. M. Whipple, and C. C. Crawford found the opposite results in the tests they administered. Various investigators in checking achievement in

1. Hanske, Carl, "Sex Differences in High School Chemistry," Journal of Educational Research, 23: 412-416, May 1931.

the subject fields find the boys superior in mathematics and science, and girls superior in languages and abstract reasoning. Here again the case is not clear. Mr. P. E. Webb found that boys excel girls in geometry while Mr. W. M. Perry found the opposite to be true. Mr. Allen in his conclusion tells us:

"Few if any of the so called sex differences are due solely to sex. Individual differences are larger than group differences. The social training of the two sexes is and always has been different producing different selective forces, interests, standards, etc. A number of variables either cannot be or are not controlled making conclusion uncertain." (1)

More recently Catherine Miles reviewed the findings of investigations pertaining to sex differences. After studying all the available research, she summarized her conclusions.

"Sex difference study at the present time has emerged from an age of prejudice and vague assumption through three decades of increasingly exact measurement and critical evaluation, including the statistical, into a period in which the pattern of existing similarities and differences has become fairly clear. It appears now on the basis of careful research that there are:

- a. probably no sex differences in average intelligence;
- b. small differences in the expression of other mental traits (especially language function and mathematical function) as a result of differences in experience and practice, possibly also with some small physiological difference elements not yet differentiated except by inference;
- c. considerable difference in general interests, attitudes, pursuits, and occupations insofar as tradition favors division of labor on the basis of sex and insofar as physical energy requirements are little involved;

1. Allen, C. N., "Recent Studies in Sex Differences," Psychol. B., 27: 394-407, 1930.

- d. large differences amounting to actual contrast in the attitudes involving sex consciousness of the individual directly and in the interests, occupations and pursuits which have become culturally sex differentiated." (1)

The article is also of interest for the explanation made of the sex differences outlined. Miss Miles's reputation is such in her field of psychology, that any conclusions she draws may be considered authoritative.

"There are two important causes of sex difference: the physical constitution and social tradition. It should be kept in mind that the traditional cause has developed from the constitutional to become a cause in itself. Education can increase or decrease social sex differences and has considerable influence on the psychological elements; it cannot alter the physical dichotomy. Coeducation is justified by research results insofar as the purely intellectual factors are concerned, but the social and emotional merits of coeducation have not been investigated experimentally. Equality of opportunity with recognition and mutual appreciation of diversity appears to afford a satisfactory basis for the broadly adequate personality development of both sexes. (2)

Further objective measurements and observations can contribute much in determining educational procedures to help our students develop into mature individuals.

1. Miles, Catherine C., Encyclopedia of Educational Research. Prepared under the auspices of The American Educational Research Ass'n., New York: Macmillan Co., 1941. p. 1114.

2. Ibid., p. 1115.

SECTION IV

ARGUMENTS FOR AND AGAINST COEDUCATION

SECTION IV

ARGUMENTS FOR AND AGAINST COEDUCATION

At present the interest in the question of coeducation is only sporadic. Scarcely an article appears either for or against it. As a whole, American people have decided in its favor. Here and there, as in Louisville, there are a few strongholds for segregation. It is of interest to us in Louisville to recall the divergent views that have been expressed on the subject.

The first reactions of the opponents of coeducation could be attributed to a hesitancy to change the "status quo" since those who opposed it had no experience with it. This devotion to tradition, would not of course be admitted; other arguments were advanced. It was assumed by the antagonists of the system that intelligence of the female was not so high as that of the male. Marbury is credited with the following statement in Thomas Woody's Women's Education in the United States.

"Finally we claim there is sex in mind, or, in other words, strongly marked mental differences between the sexes, and we will content ourselves by mentioning a few characteristics that are peculiarly feminine. First: Women's love of the helpless affecting her thoughts and sentiments and appealing more to pity than to equity. Second: The aptitude of the female mind to dwell on the concrete and proximate, rather than on the abstract and remote. Third: Woman's prevailing awe of power and authority swaying her ideas and sentiments about all institutions. Fourth: In reasoning, a woman is synthetic rather than analytic.

"To state the truth broadly, we should say that in woman the receptive faculties, in man the originative, are predominant, and though there are conspicuous exceptions to this general rule, it nevertheless is true, and is not refuted by the ordinary erroneous simile

made between the average man and the superior woman. Yet a more serious mistake arises in overlooking the normal mental power, for in order to institute a just comparison between the sexes, we must not lose sight of the fact that under strong emotion, undue pressure or extraordinary discipline, the mind of either sex is at time capable of abnormal expansion; there with such a forcing and unnatural process, it may be quite possible for a woman's intellect to produce work of a higher excellence than that yielded by the brain of an average man. But it must be remembered that if mental energy is thus strained and artificially impelled, the physical system must lose in proportion as the nerve force is misapplied and misdirected." (1)

Since exact psychological study dispelled the notion that the male sex is superior to the female in mental ability, the argument was reversed. When it was suggested by some investigators that women are superior to men in English and other languages, the antagonists seized this idea and objected to coeducation on the basis that it was bad for boys to be in the same class with girls because it gave the boys an inferiority complex. This argument became the target of Alice D. Miller in The Protected Sex.

"There, little girl, don't read,
You're fond of your books, I know,
But brother might mope
If he had no hope
Of getting ahead of you.
It's dull for a boy who cannot lead.
There, little girl, don't read." (2)

The belief that coeducation is demoralizing has been and continues to be expressed in articles such as Charles Hooper's Perils of Coeducation, excerpts from which are quoted.

1. Woody, Thomas, Women's Education in the United States, New York: The Science Press, 1929. p. 279.

2. Miller, Alice D., Are Women People? New York: George H. Doran Co., 1915. pp. 34-35.

"The coeducation system is another of those 'noble experiments' that have been weighed in the balance and found wanting. It is high time to return to the old, tried, true systems in high schools and colleges. It is high time to confine drinking and petting parties to the limbo from which they came. It is high time to call a halt to the system of education that opens private smoking rooms for young men and women where the bloom of maiden innocence and modesty is besmirched in an atmosphere of vile cigarette smoke The passionate period of youth is a perilous time even when the surest safeguards are thrown about our sons and daughters Coeducation adds fire by throwing young men and young women together at the most impressionable period of life. The fire cools when they are separated. Out of sight, out of mind.

"Under the system of coeducation the chief purpose of education is defeated Well educated men and women are not produced by coeducation. Sex ran truer to form under the old system." (1)

A similar idea that coeducation brought about a deviation from the paths of virtue, was expressed in the Encyclical Letter on the Christian Education of Youth issued by Pope Pius XI in 1930. After taking up the topics, The Importance and Excellence of Christian Education; To Whom Does Education Belong---The Church, The Family, The State; Relation Between Church and State and Education and Education Systems, he gives his views on coeducation as a system false and harmful to education. According to the Encyclical Letter coeducation is founded on

"a deplorable confusion of ideas that mistakes a levelling promiscuity and equality for the legitimate association of the sexes." (2)

1. Hooper, Charles, "Perils of Coeducation," School and Soc., 34: 322, September 5, 1931.

2. Pope Pius XI, "Encyclical Letter on the Christian Education of Youth," Jan. 11, 1930. Current History, 31: 1087, Oct.-Mar., 1929-30.

Pope Pius XI reiterates the belief that men and women are different in their bodies, their temperaments, and in their abilities.

Father Felix Pitt, Director of the Louisville Catholic Board of Education, explained that such a letter was more than a suggestion to be followed but was not a rigid order. Bishops have jurisdiction over the local dioceses. In the United States, Kansas City, Toledo, and Evansville have adopted coeducational systems throughout the schools, while most of the colleges are swinging toward similar systems. In voicing his own ideas, Father Pitt said that he would heartily approve of coeducation in the eleventh and twelfth grades but was still disturbed about the variation in maturation of boys and girls in the ninth and tenth grades.

Perhaps the most frequent and prolonged argument voiced by the antagonists of coeducation is the one that secondary education would not be so good if adjusted to fit both sexes. We find the idea voiced by Julius Sachs ⁽¹⁾ in 1903, and again by Paul Bussard in 1936. Mr. Bussard ⁽²⁾ used words from John Erskine's book The Influence of Women---and Its Cure

"When we admitted girls to the prevailing system, we were trying them out in a masculine discipline, designed to train the male They wished to invade this part of man's world and having got in they softened and spoiled it, until our educational system is neither for boys or for girls."

The idealists continue to sound the alarm that the tenets of chivalry are being discarded. They regard separate schools as the only

1. Sachs, Julius, Stanley Hall's Adolescence, New York: D. Appleton & Co., 1907, Vol. II, p. 620-21.

2. Bussard, Paul, "Coeducation," Commonweal, 24: 92, May 22, 1936.

means to preserve romance. The girl is not apt to feel that her husband is the center and glory of the world after she has rubbed along with boys in classes and committees for four years. They fear that with co-education the hopes for a womanly woman vanishes.

The feminists, in turn, do not claim these risks but continue to accentuate inequalities. They protest that the young girl can not be brought to independent thinking and straightforward action except in separate schools. In coeducational schools they maintain that because of the domination of the male, the girls are denied the joys of leadership, and therefore, they take second place in athletics and student activities. It is strange to see the two extremes, the idealist and the feminist, argue for the same system.

The advocates of coeducation attempted to answer all of the arguments put forth by those who opposed the system and at the same time offered weightier ones of their own. From an economic viewpoint coeducation is undoubtedly superior. Better facilities and equipment are possible if one school rather than two is built. The larger numbers of students group into larger classes; then, fewer teachers are needed. These points can not be denied.

A former factor in the establishment of coeducation was the demand by women for an equal education. Now, this is an accepted condition, but fifty years ago it was not generally conceded. It was pointed out that only if girls were taught at the same time and in the same classes would they share the opportunities offered boys.

Coeducationalists continue to maintain that a refining influence is exerted on boys by girls and likewise on girls by boys. Young

boys confined with others of their own sex habitually engage in improprieties of which they would not dare be guilty in other circumstances. The same is true of girls but not to the same extent.

Other arguments that appear repeatedly are that school government is easier, that students are stimulated to better study, and that the sexes form a just estimate of each other.

Jessie B. Peixotto answered the idealist, the feminist, and those who believe that coeducation has a demoralizing effect in her article, "The Case for Coeducation".

"The world needs women equipped with all clearness of vision, adaptability of mind, and strength of purpose education can give. For better or worse, woman does not behave as she did a generation ago. Our world throws men and women together. Men and women deliberate side by side in affairs of economy, politics, and personal matters. Women need a mental discipline to cope with the new circumstances. Only coeducation furnishes this type of training. In coeducational schools the activities give both sexes an opportunity in straight forward relations with each other. Any coeducational school forms a web of association claiming brain power and loyalty from each member of the group. The pressing social need is for women and men trained and trained together to prepare for today and not the customs of yesterday.

"It is claimed that coeducation tempts the male interest from education to sex. So will life unless the lesson of concentration is learned early; the temptations of later life will be more disastrous than those of school life when temperament is still malleable and deans and student welfare committees call a halt without serious penalty. The remedy of sex interest that submerges the other interests lies where the situation is not morbid---in the commonplace of a daily contact between sexes and not in sharpening sensuality by separation.
"Isolation will not train women to their contemporary task. The co-ed's share in campus life may as the feminist urges be hampered by precedence both sexes give to men. The co-ed may learn to overcome this tendency. The girl in segregated schools ignores it for four years of comfortable superiority

and then rudely disillusioned is inexperienced in meeting the real situation." (1)

The same ideas were more or less expressed by Richard Rice when he gave his beliefs of the educational value of coeducation.

"Coeducation is the conscious attempt to give men and women a more sympathetic knowledge of their particular and mental relations to the human co-operative scheme. As a condition of that part of the preparation of life, coeducation is a sign of growing consciousness of social relations. It provides a knowledge of human nature obtainable by the sexes only through constant and close mutual observation while engaged in the same serious occupations. It means unconscious intimacy with the mental tastes, processes, capabilities, idiosyncrasies of the other sex which in memory becomes the lasting foundation of intelligent unsentimental sympathy." (2)

Extreme thoughts expressed on the subject are to be found in A. S. Neill's Hearts Not Heads In The School, from which the following quotation is taken:

"The school of tomorrow will be coeducational. Our segregated schools are clearly wrong in that they separate boys and girls from the opposite sex in an unnatural and dangerous way. It is often said that there is much less divorce amongst the poor than amongst the rich and semi-rich, and that this is due to financial considerations, for the poor can not afford the expenses of divorce. An equally important reason may be that the poor know more about the opposite sex, being brought up more or less co-educationally, whereas the rich, seeing only their own sex for vital years, have little knowledge of love and sex, and rush into mistakes that some experience would have helped them to avoid. It is comparatively easy for a girl, lately come from a girl's boarding school, to fall for the first man who pays her any marked attention. She has no standard by which to compare men, and her knowledge of sex is confined to half-truths learned from other ignorant girls." (3)

1. Peixotto, J. B., "The Case for Coeducation," Forum 70: 2059-66, November 1923.

2. Rice, Richard, "Educational Value of Coeducation," Independent, 73: 1304-06, December 5, 1912.

3. Neill, A. S., Hearts Not Heads In The School, London: Herbert Jenkins Limited, 1944. p. 78.

At "Summerhill", the boarding school described by Mr. Neill, the students participate in coeducation to a greater extent than is generally accepted.

In the final analysis, according to Dr. J. K. Long, Assistant Superintendent of the Louisville Public Schools, the best argument of all is coeducation itself. Educators who have worked intimately with it or who have watched the labor of others proclaim it to be practical, democratic, and influential in developing a spirit of camaraderie between the sexes. Experience has also taught them that there has been an increase in scholarship and a lessening of sexual tension. They have found the atmosphere of a coeducational school free from artificiality and suitable for the education of boys and girls who expect to live in a normal world consisting of both sexes.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. BOOKS

- Adolescence, Forty Third Year Book, Part I, National Society for the Study of Education, Chicago: The Department of Education, The University of Chicago, 1944.
- Bevier, Isabel, Home Economics in Education, Philadelphia: J. B. Lippincott, 1924.
- Briggs, Thomas, The Junior High School, Boston: Houghton Mifflin Co., 1920.
- Curry, W. B., Education in a Changing World, New York: W. W. Norton and Co., 1935.
- Eby, Frederick and Arrowood, Charles, The Development of Modern Education, New York: Prentice Hall, 1934.
- Encyclopedia of Educational Research, Walter Monroe, Editor, New York: Macmillan Co., 1941.
- Graves, Frank P., A Student's History of Education, New York: Macmillan Co., 1936.
- Hollister, Horace A., High School Administration, Boston: D. C. Heath & Co., 1909.
- Kandal, I. L., History of Secondary Education, Boston: Houghton Mifflin Co., 1939.
- Inglis, Alexander, Principles of Secondary Education, Boston: Houghton Mifflin Co., 1918.
- Meyer, Adolph E., The Development of Education in the Twentieth Century, New York: Prentice Hall, 1939.
- Miller, Alice D., Are Women People? New York: George Doran Co., 1915.
- Neill, A. S., Hearts Not Heads In The School, London: Herbert Jenkins Limited, 1944. p. 78.
- Strayer, George D. and Englehardt, N. L., School Building Problems, New York: Teacher's College, Columbia University, 1927.
- Terman, L. M. and Miles, Catherine, Sex and Personality: Studies in Masculinity and Femininity, New York: McGraw Hill Co., 1936.

Woody, Thomas, A History of Women's Education in the United States,
New York: The Science Press, Vol. I, Vol. II, 1929.

B. PERIODICALS

- Allen, C. N., "Recent Studies in Sex Differences," Psychological Bulletin, 27: 394-407, May 1930.
- Bagley, W. C., "Why Has Coeducation Been Abandoned in the Soviets' Middle Schools?" School and Society, 60: 151-2, September 2, 1944.
- Bussard, Paul, "Coeducation," Commonweal, 24: 92, May 22, 1936.
- Day, L. C., "Boys and Girls and Honor Ranks," School Review 46: 288-99, April 1938.
- Douglass, Harl and Newman, Olson, "The Relation of High School Marks to Sex in Four Minnesota Senior High Schools," School Review, 45: 282-88, April 1937.
- Edgerton, Harold and Stewart, Britt, "Sex Differences in the Science Talent Test," Science, 100: 192-3, September 1944.
- Goodenough, Florence L., "The Consistency of Sex Differences in Mental Traits at Various Ages," Psychological Bulletin, 34: 440-62, 1927.
- Hanske, Carl, "Sex Differences in High School Chemistry," Journal of Educational Research, 23: 412-16, May 1931.
- Herda, F. J., "Some Aspects of the Relative Instructional Efficiency of Men and Women Teachers," Journal of Educational Research, 29: 196-202, November 1935.
- Hollingsworth, Leta S., "Comparison of Sexes in Mental Traits," Psychological Bulletin, 15: 427-32, 1918.
- Hollingsworth, Leta S., "Variability as Related to Sex Difference in Achievement," American Journal of Sociology, 19: 510-30, 1914.
- Hooper, Charles, "Perils of Coeducation," School and Society, 34: 322, September 1931.
- Osborn, L. G., "Relative Difficulty of Subjects," School Review, 47: 95-105, February 1939.
- Peace, Glenn, "Sex Differences in Algebraic Ability," Journal of Educational Psychology, 21: 712-714, 1930.
- Plexotto, J. B., "The Case for Coeducation," Forum, 70: 2059-66, November 1923.

Pope Pius XI, "Encyclical Letter on the Christian Education of Youth," Current History, 31: 1087, Oct.-Mar., 1929-1930.

Rice, Richard, "Educational Value of Coeducation," Independent 73: 1304-06, December 1912.

Whitburn, J., "Coeducation," Education Digest 12: 52-54, January 1947.

C. THESES

Lapidus, Hyman Lee, The History of Coeducation in Secondary Education of the United States, New York: College of the City of New York, 1929.

Williams, Sister Mary Elsie, Coeducation in Secondary Schools, Notre Dame: St. Mary's College, 1934.

D. BULLETINS

Biennial Survey of Education in the United States, Washington, D.C.: Government Printing Office, Bulletin, 1923, No. 29-547, 1918-20.

Biennial Survey of Education in the United States, Washington, D.C.: Government Printing Office, Chapter 5, 1937.

The information received in interviews with Dr. J. K. Long, Assistant Superintendent of the Louisville Public Schools, and with Father Felix Pitt, Director of Catholic Education in the city of Louisville, were used in the development of the topic.

Later articles on "Coeducation" are not available since the subject is only of local interest.