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A Contested Practice in Nineteenth- and Twentieth-Century Secondary Schooling

Nelleke Bakker

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Abstract

This chapter discusses the history of coeducation in secondary schooling, mainly in Europe and North America. The analysis focuses on the gendered characteristics of educational systems and curricula, as well as on national discourses about single-sex or mixed schooling. The focus is on the latter half of the nineteenth and the first decades of the twentieth century, when the merits and perils of coeducation were debated for this stage of schooling. Until after World War II, children of the working class hardly ever attended school past the age of 13 or 14. Therefore, this is a history of middle- and upper-class education. In the early nineteenth century, girls had to do with a very limited, private education that prepared only for homemaking and motherhood, while boys could attend public grammar schools that opened the door to the university and the professions. From the mid-nineteenth century, initiatives to improve the quality of girls' education were taken. Few countries opened up boys' public schools for girls; in most cases, new girls' schools were established with more serious but still unequal curricula, focusing mainly on humanities. Schools teaching a curriculum equivalent to that of the boys' schools were not created until after the turn of the century,

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when a more critical view of coeducation became the rule. Democratization and coeducation came hand in hand with the introduction of comprehensive mixed secondary schooling in the 1960s and 1970s. The shortcomings of coeducation, however, were not rediscovered until after it had generally been introduced.

Keywords

Coeducation · Coinstruction · Secondary schooling · Single-sex schooling · Gendered educational systems · Gendered curricula · Comprehensive mixed schools

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Introduction

Today, across the western world, coeducation is the rule at all levels of schooling. However, in most countries, the coinstruction of boys and girls in a single classroom and with an identical core curriculum is a relatively recent phenomenon. In many cases, single-sex schools prevailed until the 1960s and 1970s, especially in secondary and vocational education. In those years, new kinds of integrated schools replaced the existing boys' and girls' schools. In elementary schools, mixed classes met with less opposition, except among Roman Catholics who as a rule rejected coeducation even of primary pupils. For a long time, higher education was a boys' privilege, but when around 1900 universities finally opened up to girls, coeducation turned out to remain relatively undisputed at the tertiary level.

This chapter discusses the history of coeducation of girls and boys between the ages of 12 and 19 from the early nineteenth to the late twentieth century. It concerns primarily secondary schooling, but does not exclude other kinds of teaching of teenagers beyond the primary level. Vocational training, until recently usually in sexually segregated institutions, is, however, not considered, with the exception of teacher training. This is because late nineteenth- and early twentieth-century normal schools and teachers' seminars cannot be distinguished from secondary education with respect to either the age of admittance (between 12 and 16) or the level of teaching. However undefinable "secondary" education and how varied the names of the referred schools before the last half century may be, examining it implies a focus on middle- and upper-class youth, as school attendance of the working class did as a rule not reach beyond the age of 13 or 14.

The analysis focuses on the gendered characteristics of the educational systems and the curricula of secondary schools, as well as on national discourses about single-sex or mixed schooling in a number of western countries. Next to the development of national systems, transnational influences will be examined. Few historical studies have paid attention to coeducation explicitly, but there is an abundant literature on the history of girls' secondary schooling that allows for a reconstruction of the ups and downs of coeducation, especially in countries where it was debated at some point in history, like Britain, the United States, and the Netherlands. Although a systematic comparison has not yet been made and no comprehensive study is available, it seems safe to assume that predominantly Roman

Catholic countries – like France, Belgium, and Italy – have shown the least receptivity to coeducation and that imperial countries have had considerable influence on the education in their colonies (Albisetti et al. 2010; Allender 2016; Proctor 2007).

The history of coeducation on the secondary level is a history of girls moving forward from a limited and one-sidedly feminine education to getting new academic high schools of their own or access to the existing boys' grammar schools. It starts around the middle of the nineteenth century, when industrialization, urbanization, and bureaucratization manifested themselves more particularly across the west. As before, girls' schools socialized middle-class girls to their expected roles and contributed to the growth of separate spheres for men and women in the bourgeoisie, but both mixed and single-sex quality schools contributed to the isolation of this class from the lower orders, a process that was meant to be undone only after World War II with the introduction of democratic and coeducational comprehensive schools and a rising age of obligatory schooling. The education of middle- and upper-class girls will be followed through the years when the merits and perils of coeducation were debated on scientific instead of moral grounds and curricula became more gender-specific, until the 1980s, when feminists (re)discovered coeducation's hidden "injuries" for girls after it had generally been implemented. The emphasis will be on the second half of the nineteenth and the first decades of the twentieth century.

Schooling for Separate Spheres

The United States has been used to coeducation in urban public schools much longer than European countries. Examples of American boys' state-maintained grammar schools opening their doors to girls can be found from the late 1840s (Tyack and Hansot 1990), while European girls had to wait until the turn of the century before boys' schools that prepared for the university admitted small numbers of them or girls' schools teaching a curriculum equivalent to the most prestigious German *Gymnasium*, French *lycée*, or British public school were created (Albisetti et al. 2010). This is a remarkable difference, but it may not obscure the fact that up to that time across the west, all girls' education beyond the elementary level was founded on what was considered middle-class girls' destination: becoming a ladylike homemaker, wife, and mother. Around 1800, in both Europe and the USA, publicly maintained town schools were exclusively male, while girls were educated privately: at home by family members, at small day schools, or at a boarding school. Home schooling by a governess was a prerogative of the elite. In each case, the quality of a girl's education varied according to the level of training of her teachers, as there were no fixed standards for private teaching.

Throughout the Victorian era, English Protestant middle-class girls were taught at home or at a small private school that was often located in the household of the schoolmistress. In advertisements, proprietors described their institutions in domestic terms, indicating the continuity between the curriculum and the girl's future in the home. Public schools that benefitted boys were thought inappropriate for girls, as was mixing social classes. Middle-class boys might share homeschooling with their

sisters up to the age of 10, when they would enter a public boarding school, where their character was bound to be molded according to the ideal of the public school that emphasized academic competence, discipline, sportsmanship, and leadership. The boys who fitted the system received a classical education in Latin, Greek, and mathematics that prepared them for the university. Girls, by contrast, received “a sound English education” and “the usual accomplishments.”

At best, an “English” education offered a comprehensive program in all the elements of the English language – literature, grammar, composition, elocution, and calligraphy – with French conversation, history, geography, elements of natural science like botany, and the teachings of either the Church of England or one of the dissenting religions. English grammar was the counterpart of the Latin grammar taught to boys, while French was regarded as a frivolity because it was taught through conversation, rather than through grammar and translation. The “female accomplishments” referred either to the cultural studies of music, art, dance, and drawing or to the totality of women’s studies. The segregated curriculum was rooted in the eighteenth-century evangelical tradition that emphasized domesticity for women and was mapped onto an enlightened concept of a “natural” mental difference between the sexes that upheld women’s supposed lack of fitness for higher study. Unlike the unwanted outcome of female learning, the “bluestocking” who spoiled her chances to marry by too much study, the “accomplished” woman’s learning was deployed in the private home, showing both her decorative abilities in the kind of entertainment that cemented middle- and upper-class social networks and a morally “superior” motherliness in serving others (Goodman 2010; Theobald 1996).

Costly fashionable boarding schools were the privilege of the daughters of the British upper middle class. Their curricula, however, did not differ significantly from those of the smaller ladies’ schools, although a larger teaching staff enabled more variety in the subjects. In the 1830s, the curriculum of one “finishing” boarding school for rich girls in Brighton covered no more than deportment, drawing, calisthenics, foreign languages, English, history, and geography (Purvis 1991).

By the mid-nineteenth century, at least half of all middle-class girls in England attended a private school, ranging from fashionable schools emphasizing the accomplishments to the academically sound schools of Unitarians and Quakers. The curriculum of the Quaker girls’ school at Stoke Newington in 1824 testifies, for example, to the Quaker ideal of an education of equal value for both sexes, as it included English grammar, arithmetic, geography, astronomy, ancient and modern history, elements of mathematics, physics or experimental philosophy, chemistry, natural history, French and needlework, to which at extra cost might be added Latin, Greek, Italian, and drawing (Goodman 2010). Presbyterian Scotland, where coeducation in elementary schools was much more common, provides another example of a deviation from the predominant pattern of very limited and one-sidedly feminine secondary education for girls in the early nineteenth century. In the 1830s and 1840s, Glasgow and Edinburgh saw the founding of, among more traditional schools, a number of ladies’ institutions with an identical curriculum to the boys’ departments. The most innovative aspect of these curricula is the inclusion of sciences like

physics, astronomy, physiology, and chemistry, taught by masters with a university degree. Inspiration was found with enlightened thinkers for whom training of a girl's full intellectual capacities was not incompatible with her future domestic duties (Moore 2003).

Traveling women entrepreneurs exported the British Protestant model of ladies' schools to the United States, Canada, Australia, New Zealand, and South Africa, bringing along all kinds of cultural capital. These schools stuck to the traditional accomplishments curriculum, took in pupils as boarders or day girls, and made arrangements to educate them, while their proprietors hired the best teachers available, cultivated links with the churches, and carefully watched their reputations and connections in their new communities. Though no part of a system, unregulated, and staffed by women teachers without a formal qualification, many of the "female academies" founded in colonial settings in the mid-nineteenth century survived into the next century by adapting as good as possible to the local conditions. A number of these academies became well-known institutions, some of which developed into teacher training colleges or tertiary colleges (Theobald 1996).

Next to the English, Protestant model of female middle-class education – with its roots in the evangelical culture of domesticity – a concurrent Roman Catholic model traveled likewise across the globe by the agency of female religious teaching orders. They established large numbers of boarding schools for bourgeois girls. Most of these orders had their origins in Old Regime France, particularly in Counter-Reformation's efforts to provide serious moral schooling for both boys and girls. Post-revolutionary France saw the reemergence of the female religious congregations, such as the Ursulines, and the reopening of their schools, as well as the creation of new congregations that specialized in the teaching of a Catholic version of an "English" education to upper- and middle-class girls. Some of these specialized in boarding-school education, among whom the Ladies of the Sacred Heart were the most influential and elitist. They aimed to rechristianize French society through the education of girls (Rogers 2010). By the mid-nineteenth century, these orders had branched out to overseas countries with considerable Roman Catholic populations – such as Ireland, England, Canada, and Australia – so successfully that they had a monopoly of the teaching of Catholic girls there. Convent schools attracted large numbers of pupils in a wide range of colonial and foreign settings and often had excellent reputations (Goodman 2010; Goodman and Rogers 2010; Raftery 2015).

Quality Secondary Schools for Girls

From the middle of the nineteenth century, an increased need for quality secondary education for girls materialized in the founding of new academic schools for girls in many European countries. This impulse culminated in acquiring the right to university admittance for the graduates of the most intellectually ambitious tracks. In some countries, such as Germany, France, and Belgium, the new quality girls' schooling emerged alongside an existing male system and shared many of the latter's characteristics, notably a conviction that secondary studies should not prepare for

a vocation. In Italy and Spain, however, the emergence of more serious studies for girls took a vocational path via teacher training. In these countries, girls aspiring to a postprimary education did not have to challenge gender norms, as throughout Europe education was seen as an acceptable profession for women. In England, opportunities for girls expanded along both lines. The development of new girls' schools is best documented for England, Germany, and France. The explanations that are given focus on the need of rapidly growing economies for educated women, like teachers, nurses, and administrators, on the demographic "surplus" of women that stimulated girls to look for a "useful" profession in case she remained unmarried, on feminist promoters of equal opportunities for both sexes, and on female teachers' activism to enlarge their own opportunities. Women headed only schools with an exclusively female staff, which explains why associations of headmistresses opposed coeducation.

In England, the first attempts to provide for a higher level of education for middle-class girls were born out of discomfort with the lack of quality of much female teaching. Queen's College was established in London in 1848 as an institution for raising the educational qualifications of governesses, but it admitted girls from the age of 12. Church of England clergymen formed a significant part of its professors. That may have been a reason why, in the next year, a second college for women was established by a wealthy Unitarian woman at Bedford Square. Both colleges provided no more than a good secondary education, but both were drawn into higher education after 1878, when London University pioneered in the admission of women on the same terms as men. Early students of both colleges include women who in later life became involved in the women's movement and in public life or became headmistresses of girls' high schools.

In 1868, the Schools Inquiry Commission (SIC) found only 14 endowed grammar schools for girls in England and Wales compared to 820 schools for boys and, after having considered but dismissed coeducation, called for improvement of the overall inferior quality of secondary education for girls. As model of a new girls' school, they presented Frances Buss' North London Collegiate (NLC) School. This school had been established in 1850 as alternative to the fashionable ladies' institutes. It provided an academically sound and liberal education. The headmistress, a former Queen's student, encouraged intellectual attainment according to "male" academic standards, but she equally valued traditional "female" qualities. The curriculum included Latin, French, mathematics, sciences, history, geography, divinity, and physical education. Lessons were organized only in the mornings, so that afternoons could be spent at home learning "domestic and social virtues" or taking optional courses in German, Italian, music, painting, and dancing (Dyhouse 1987; Purvis 1991).

The model of this "high" school for girls was adopted by the Girls' Public Day School Company (GPDSC) that was set up in 1872 by a feminist organization, the National Union for Improving the Education of Women of all Classes Above the Elementary (1871). The GPDSC aimed to provide a first-class education in endowed day schools to girls of all classes. Therefore, fees were placed as low as possible. Knowing how important the accomplishments were to middle-class

parents, the schools held on to instruction in the rules about appropriate conduct and dress. By 1901, the GPDSC had founded 38 endowed schools following Miss Buss's model (Goodman 2010). It also established a training college for women secondary school teachers, called after one of its initiators, Maria Grey. It is remarkable that around 1870, she was one of few English commentators who considered the American practice of coeducation "an advantage to both sexes" but was convinced that the time was not yet ripe for it to be implemented in England. In her opinion, the two sexes would learn by "common work for common aims to recognize their common human nature, to complement what in each is deficient" (Albisetti 2000, p. 476).

The first girls' public boarding school, the Cheltenham Ladies' College (CLC), was established in 1854 by professional men who wanted a school for their daughters that matched the quality of Cheltenham College for Boys. Headmistress Dorothea Beale, another Queen's alumna, started with a curriculum that was only slightly more academic than the traditional curriculum, but in a few years, she extended it to include Latin, Greek, mathematics, and science. After a successful campaign to open up the local public examinations for girls, Beale's pupils were entered. From 1863 she, moreover, stimulated her pupils to return to the classroom to further improve the quality of teaching. By the end of the century, the CLC was involved in training teachers for kindergarten, elementary, and secondary schools. Just like the NLC influenced the development of quality day schools for girls, the CLC had an impact on public boarding schools founded in the final decades of the century. All of these schools followed a strategy of double conformity to both an academic curriculum and certain standards of ladylike behavior, to which competitive games like lacrosse, cricket, and hockey were added to imitate the boys' model of public schooling (Dyhouse 1987; Goodman 2010; Purvis 1991).

From the 1870s, even that traditional English model of boys' education started to adapt to the SIC's recommendation to differentiate between levels of grammar schools and introduce a vocational element into their curricula. To the classical "side," a "modern" one was added in virtually all boys' public schools (Hunt 1987), with the effect that schooling became more equal for boys and girls and comparisons of the results could be made. When the sexes studied the same programs, the girls did "very decidedly better" than the boys in the final decades of the nineteenth century (Jacobs 2001). Mixing of the sexes took place only in some "third-grade" grammar schools in England (Albisetti 2001).

German lands were relatively autonomous in matters of education. Compared to national states, they had a tradition of more active involvement, but they distributed money no less unevenly between boys and girls. In Catholic Bavaria, the post-1815 revival of Catholic education led to the readmission of nuns as teachers in the girls' schools. The *Englische Fräulein*, who had a very good reputation as teachers of middle- and upper-class girls, were especially successful with the reopening of five institutions in the 1820s. By 1873, thanks to their ability to transfer teachers from their houses in England, Ireland, and Italy to Germany, they had managed to found 14 institutes with 58 branches in Bavaria. In 1861, in Lutheran Prussia, private girls' schools outnumbered those maintained by the state, but they were far smaller in

size and more expensive. Some private foundations were eventually transferred to municipal authority, and as a result, schools directed by women were taken over by male principals. Private *höhere Töchterschule* (girls' schools) offered not much more than German language, writing, and the "female accomplishments," while public secondary schools provided a more extended curriculum, including French, arithmetic, history, geography, and, in the highest grade, English.

During the 1860s and 1870s, in the German states, many secondary girls' schools responded to a growing shortage of male teachers by adding a teachers' seminary. In 1874, Prussia banned nuns from teaching as a result of Otto von Bismarck's anti-Catholic *Kulturkampf*. As a consequence, Prussia founded new teachers' seminaries for Catholic laywomen, while other states such as Bavaria established their first nondenominational girls' secondary teachers' seminaries. While the German women's movement started a campaign to upgrade girls' education, the male principals of secondary girls' schools opposed adopting the boys' classical *Gymnasium* curriculum, the only track that gave access to higher education and middle-class careers. Instead, they clung to the "feminine" character of the girls' schools. Given the state's reluctance to open up academic careers for girls, in 1893, the president of the German Women Teachers' Association, Helene Lange, started a 4-year course to prepare graduates of secondary schools for the *Abitur*, the final examination that gave access to a German university. After continued pressure from the women's movement, in 1908, a 10-year girls' *Lyceum* was established by the state, after which a 3-year teacher training course could be followed, that eventually opened the possibility of enrolment in university study. A few years later, in 1912, two secondary tracks for girls leading directly to *Abitur* were created as a separate but equal part of the school system, identical with the boys' schools: a *Gymnasium* with Latin and Greek and a *Realgymnasium* with Latin, modern languages, and sciences (Albisetti 1988; Jacobi 2010).

Like elsewhere in Europe, in France, the 1860s witnessed initiatives to improve secondary girls' education. After a survey of girls' boarding schools had highlighted the increasing weight of religious orders, who ran about two thirds of the schools, Napoleon III's liberal Minister of Public Affairs urged the creation of 3–4-year secular secondary courses for girls in 1867. Although most of the approximately 60 courses that he established were short-lived, received no state funding, and were a far cry from the existing boys' *lycées*, they represent a significant step in the involvement of the French state in girls' secondary education. The teachers came from the local *collèges* and *lycées* for boys and – even more radical – religious instruction was eliminated. That is why the bishop of Orléans, Felix Dupanloup, led a Catholic campaign against the new courses, scaring away the public by arguing that girls' education should remain in the hands of women and that these courses would bring about "professors of atheism," a "dreadful" kind of woman.

Nevertheless, in 1880, the liberal Minister Camille Sée created a new national and public system of *collèges* and *lycées* for girls. Despite their names, the structure and curricula of these schools were distinctly feminine. Rather than a 7-year course of study leading to the prestigious baccalaureate degree that opened the door to university study for boys, Sée's law set in place a watered-down 3-year program,

followed by an additional 2 years for the more intellectually ambitious. The courses proposed were similar to those present in the better girls' boarding schools: French literature, modern languages, history, geometry, physics, and natural history, to which even more particularly "female" subjects like domestic economy, hygiene, and needlework were added. Instead of a baccalaureate the girls received no more than a certificate. As before, municipalities were not eager to establish the new kind of schools for girls, while the Catholic bourgeoisie failed to flock the new secular institutions, preferring the familiar environment of the religious boarding schools for their daughters.

Increasingly, moreover, the much more limited feminine curriculum of France's secondary girls' schools came under criticism from teachers, professional organizations, and feminists who argued that girls should be trained for the baccalaureate. Finally, in 1924, a new law extended the public secondary program for girls from 5 to 6 years and introduced a curriculum that allowed girls to prepare for the baccalaureate. By 1930, the old feminine curriculum had virtually disappeared, but Catholic opposition to girls studying for the baccalaureate remained strong and was reinforced by Pope Pius XI's encyclical *Divini Illius Magistri*, issued in 1929, that harshly condemned coeducation. However, this did not prevent that, when a girls' *collège* or *lycée* was not available in the vicinity, boys' schools accepted girls. Statistics reveal that by 1939, only 17% of French girls attending secondary schools were in boys' schools (Rogers 2010).

Belgium followed the example of Minister Sée in 1881 and introduced a law that stimulated towns and provinces to establish girls' secondary schools, the quality of which varied considerably. However, as in France, convent schools continued to attract the larger part of the female secondary pupils, and enrollment in boys' schools was not allowed until after World War I (Gubin 2010). In other Catholic countries with secondary schools for girls with a "female" curriculum, mostly normal schools, the nonavailability of this kind of school in the vicinity provided families the argument to place girls in a high-quality boys' school. After permission was obtained in the early 1880s in Italy, Spain, and Portugal, this smuggling in of girls occurred much more frequently than in France. By 1920, in Italy, the number of girls attending coeducational public schools almost equaled that of girls in private single-sex schools, while in Spain, about one third of the girls preparing for a baccalaureate in the late 1920s did so in a boys' school (Albisetti 1999, 2004a).

The Merits and Perils of Coeducation

The admission of middle-class girls to boys' public grammar schools and the founding of coeducational high schools in the United States during the mid-nineteenth century were largely the result of parental and feminist pressing for more serious education for girls in a society that was already used to mixed elementary schooling, even in the upper grades. In addition, the saving of public money and coeducation's practicality, especially in sparsely populated areas, steered local school authorities in the same direction. Sometimes, sources allow insight into

the reasons why grammar schools turned to mixing the sexes. In 1848, the school committee of Charlestown, Massachusetts, decided to reorganize its school system. It had just created a coeducational high school and decided to mix the sexes in the three formerly single-sex grammar schools. After a group of residents had protested the shift to coeducation, the committee asked the parents of a former girls' school to detail their objections and the masters of the grammar schools to comment on mixed schooling. The question was also put before the masters of the grammar schools in nearby Salem that had introduced coeducation earlier. The controversy that evolved foreshadowed most of the arguments over mixed schools that appeared in educational journals and reports in the next half century.

The protesting parents wanted to keep the sexes strictly separate and also preserve class barriers in the Charlestown grammar schools. They appealed to tradition, invoked the principle of separate spheres for the sexes, and hinted at the danger of association of their daughters with lower-class boys. The teachers focused on what happened in the classroom. Some were convinced that mixing the sexes produced greater restraint and decorum and thus fostered discipline in the schools. Others said that coeducation produced better morals. The masters from Salem grammar schools gave differing testimonies as to didactics. One preferred teaching single-sex classes because of different needs as regard methods of discipline and instruction. Another said that girls might soften and refine the boys but that boys coarsened the girls. Only the third Salem master was so convinced of the favorable mutual influence of boys and girls that he even placed them side by side at the same double desks. School board members took the part of the parents. They were not convinced that discipline improved in mixed schools or that the more diligent girls would stimulate the boys to learn more and subscribed to the parents' idea that coeducation threatened morality and that the future destinies of girls and boys were so different that they should be educated separately. The single dissenting board member objected especially to the parents' aversion of the social mixing, which he valued as the essence of public schooling. In a coeducational school, he had observed that both learning and deportment improved through mutual emulation of boys and girls. His and the teachers' arguments must have convinced the school committee, because after a long discussion, they came to the conclusion that mixed grammar schools were best and fitted the overall social organization of society.

In the 1850s, coeducation became a common topic of discussion in American state teachers' associations and in the reports of state superintendents. In 1851, the Ohio Teachers' Organization, for example, voted unanimously for mixed schools, while in 1854, in Pennsylvania, the teachers' organization endorsed a report approving coeducation. A classic and influential summary of arguments for coeducation was given by the St. Louis superintendent William T. Harris, who was later to become US Commissioner of Education. With the elementary schools and the local high school already mixed before 1858, in the early 1870s, he witnessed the transition of the St. Louis grammar schools from separate to mixed and was convinced that coeducation improved discipline and instruction for both sexes as their differences were tempered. Boys' rudeness and girls' sentimentality and frivolity disappeared, Harris argued. Likewise, mixing them in the classroom improved

boys' and girls' different mental abilities and promoted a balanced kind of instruction and learning that would avoid both "masculine" mechanical formalizing and "feminine" learning by rote. He moreover held that the psychological and sexual development of both boys and girls benefitted from their mutual association, as did their school results: girls made "wonderful advances even in mathematical studies," while boys took hold of literature far better. In 1882, city school superintendents' responses to a survey by the US Bureau of Education indicated that a large proportion of Harris' peers agreed that, apart from economy and institutional convenience, coeducation was "beneficial" because of "a more harmonious development of both sexes" (Tyack and Hansot 1990, pp. 103–104).

One argument against coeducation rapidly evaporated. Once girls had been admitted to coeducational secondary classrooms, they did at least as well as boys, and often better. In Washington D.C., in the 1870s, girls tested notably better than boys in English grammar and spelling and – against the expectations – about the same in mathematics. The same pattern was manifest in the academically oriented coeducational high schools that were established from the 1860s. They attracted more girls than boys and struggled with massive rates of "retardation" and "drop-outs" of "hand-minded" boys to such an extent that toward the end of the century, a campaign was initiated to differentiate the curricula and add vocational classes of all sorts to help solve what was called the "boy problem."

Nevertheless, in the early 1890s, most public school leaders took it for granted that public schools were coeducational and that the curriculum should be substantially the same for both sexes. Another survey by the US Office of Education among superintendents showed that the matter was more or less settled. Out of 628 cities, only 41 had any single-sex secondary schools. Throughout the national school system, authorities believed that coeducation brought better discipline, more balanced instruction, and a healthier psychological and sexual development of both boys and girls. Women had proven themselves at least equal to men in intellectual capacity, and the fears expressed by physicians such as Edward H. Clarke in 1873 that strenuous study would undermine their health and fertility had been shown groundless (Tyack and Hansot 1990).

Around the turn of the century, European critics, as well as admirers, commented on coeducation as "an American invention." Among travelers who wanted to observe the phenomenon with their own eyes were many feminist teachers, who reported home enthusiastically about coeducation as the "powerful stimulant for the progress of studies and of moralization." This appreciation, however, seldom led to proposals that it be imitated in Europe (Albisetti 2001). Progressive educators, especially in England and Germany, were among the most enthusiastic supporters of coeducation. Reformers such as J.H. Badley of Bedales and Cecil Reddie of Abbotsholme applied it in their boarding schools. They saw it as a means to realize the more sublime ends of the "new education," such as the "perfection" of the relations between men and women. It supported, moreover, their veneration of the "natural" family as model to emulate in schools. Like the well-known American protagonist of "new schooling" John Dewey, they also believed that coeducation fitted democracy and made "natural" differences

between boys and girls decrease and morals and manners improve. Boys would become “less rough in deed and coarse in word,” whereas “[g]irls lose many little personal vanities and their tendency to titter and giggle,” one observer reported in 1897 (Brehony 1987, p. 11).

The ensuing theoretical reaction against coeducation was inspired first of all by the psychologist G. Stanley Hall’s voluminous study *Adolescence*, first published in 1904. Unlike the Roman Catholic Church that launched vitriolic attacks on coeducation as threat to morality, this evolutionary psychologist and child study pioneer focused on harm done to the individual development of adolescents. Because motherhood was women’s destiny, girls’ education should be directed toward it, he held. Therefore, reproductive harm should be prevented by adapting the curriculum to the “female” way of thinking, less abstract and more concrete, and to girls’ superior ardor and accuracy, which made mental overburdening a serious risk. According to Hall, girls needed a curriculum with an emphasis on child care, hygiene, housekeeping, religion, and some knowledge of nature and the environment. A different learning style, moreover, dictated separate schools to prevent boys from contenting themselves with “female” memorizing without exercising their “male” talent for discovering and, consequently, without the further development of their more complicated minds. Hall countered the arguments of coeducation’s advocates concerning improved morals and manners by pointing out that, instead, a full realization of sexual differentiation was essential to progressive civilization. Teenage boys should be allowed to have fits of brutality in order to become “real” men, while girls needed opportunities for their sentimental instability before settling down. Daily association would make boys and girls too much alike, he warned (Bakker 1998). These ideas did not have any influence on school practice, but they provided fuel to opponents of coeducation, especially after World War I (Albisetti 2004b; Tyack and Hansot 1990).

Despite the common assumption at the time that it was an American invention, coeducation in secondary schools was not limited to the United States. Another predominantly Protestant country, the Netherlands, practiced it in the latter part of the nineteenth century. From 1857, higher primary schools were established for the children of the lower middle class. Like elementary schools they were mixed, except for Catholic schools. In 1863, a Secondary Education Act introduced a new kind of school for upper middle-class boys, the *hogere burgerschool* (HBS), with a science-oriented curriculum, as an alternative to the classical *Gymnasium* that prepared the sons of the elite for the university. In the wake of the HBS, a quality secondary girls’ school, the *middelbare meisjesschool* (MMS), with a humanities-oriented curriculum was created. But that curriculum did not satisfy the more ambitious among upper middle-class girls. After the first girls had officially been admitted to the HBS in 1871 and to the classical *Gymnasium* in 1880, the number of girls in these schools continued to increase rapidly. From the beginning of the new century, girls in former boys’ schools outnumbered those in the MMS, which – unlike the HBS – was never upgraded to a level that provided access to the university. Dutch upper middle-class girls, or their parents, preferred the “male” curriculum and the possibility of continued study above the separate and unequal feminine curriculum of the MMS.

As in the United States a few decades earlier, the fast-growing proportion of Dutch girls attending mixed academic schools inspired organizations of secondary teachers to inquire into their members' experiences. In 1881, 10 years after the first girls had been admitted to an HBS, neither teachers nor school directors reported classroom discipline or morality to be threatened by their presence. The fear of "feminization" of the curriculum or teaching methods lacked empirical ground, although critical notes concerned the inadequacy of the boys' curriculum for girls. Girls were reported to perform less well in mathematics and sciences and to discontinue their study of these subjects more often while performing better in languages. All respondents took different intellectual capacities of the two sexes for granted, as well as different motives for study. In 1899, another inquiry showed that almost every HBS director supported coeducation. Like progressive educators in Germany and England, they stressed the pedagogical benefits of girls and boys growing up together, called coeducation "natural," and praised the neutralization of erotic tensions. As with American teachers, they reported positive influences on the behaviors of both sexes: boys became less coarse and girls less prim and coquettish. In 1898, at the National Exhibition of Women's Labor's conference on education, the topic was discussed extensively. Although the delegates included women MMS teachers, all agreed that equal opportunities for girls would best be served by the teaching of an identical core curriculum in coeducational schools (Bakker and van Essen 1999).

(Un)differentiated Curricula

It did not take long before in the Netherlands, and elsewhere, a shift toward a more critical evaluation of coeducation occurred. As in the United States, this had hardly any implications for coeducational practice. In the Netherlands, for example, girls continued to prefer mixed secondary schools above MMSs until after World War II, when Catholic support brought the girls' school a short-lived renaissance before it was abolished by law in 1968.

In the Dutch case, the shift toward a more critical position can first be observed shortly after the turn of the century. In 1907, another inquiry into the experiences of teachers and directors of HBS's and *Gymnasias* that had opened up to girls was published. Although it confirmed the positive influence of the girls on pupils' morals and manners, learning styles and individual development turned out to be more important now. It was reconfirmed that in mixed classes, boys were ahead in the sciences and girls in the literary subjects, but some respondents added the consideration that girls fell behind only in the upper grades, when adolescence started, and managed to keep pace in the lower grades only through diligence. Nevertheless, girls' school careers at the *Gymnasias* and HBSs were on average only a little less successful. It was explicitly stated now that there were no indications that school had a detrimental effect on girls' health. Still, the report makes clear that, even in this country, the days of unambiguous support for coeducation were gone. The questions as well as the answers show a new sensitivity to adolescence as a critical phase in the development of gender identity (Bakker 1998).

The inspiration came from Hall and other scientists. Throughout the first half of the twentieth century and across Europe, their ideas inspired proposals to further differentiate the curricula of boys' and girls' schools and add "female" subjects to the latter, such as household economics. Some feminists who used to support coeducation changed their opinion because of either a lack of women teachers at mixed schools for the girls to identify with during adolescence or fear of leveling of gender differences. Concern about homogenization of the sexes, a traditional Catholic objection, was expressed more frequently also by European observers of American coeducation; it would produce masculinity in women and effeminacy in men (Albisetti 2001; Bakker 1998). Around 1910 in Europe, as in the United States, physicians and psychiatrists produced a wave of publications on gender differences that stressed the weakness of the female body and mind and the imperative to prevent girls from studying too much. Some mentioned adolescence as a high pathogenic risk, especially for girls (Albisetti et al. 2010; Bakker and van Essen 1999). Psychologists focused likewise more often on gender differences. However, the results of their most important new instrument, intelligence testing, did not confirm assumptions about intellectual inferiority of women or an inherent lesser ability of girls at subjects like mathematics and science (Albisetti 2004b).

In spite of the increasing emphasis on sexual differentiation, the development of gender identity, and gender-specific learning styles, coeducation continued to grow in many countries during the interwar years. It was stimulated by the increasing demand for quality secondary education for girls and by financial considerations, especially during the 1930s economic depression. Mixed schooling saved money. In England, for example, despite an unfriendly public opinion, the number of mixed secondary schools continued to grow throughout the first half of the twentieth century. In 1939, no less than one third of secondary schools were mixed (Goodman 2010). Fascist regimes in Italy, Germany, Spain, and Portugal, however, made separate-sex schools with strongly differentiated curricula obligatory, including girls' schools nicknamed as "pudding academies" (Albisetti 1999; Jacobi 2010).

In the postwar period, maternalism and the emphasis on differentiated curricula, including child care and household economics for girls, were even more particularly stimulated by Bowlbyism. Another impetus came from an extended school attendance of lower-class and ethnic-minority pupils, for whom vocational and gender-specific subjects were considered more important than for white middle-class children. At the same time, the demand for quality secondary education for middle-class girls continued to grow, with governments being more compliant to their educational demands because of the postwar economic boom. These developments produced paradoxical conditions in secondary education: a convergence of boys' and girls' curricula at the highest, pre-university level, next to an increasing divergence at lower levels, especially the reinforcement of vocational aspects in the curricula.

The introduction of comprehensive mixed schools in most western countries in the 1960s and 1970s was partly an answer to the increased participation of the lower classes in secondary nonvocational education. It was also stimulated by a

rejuvenated women's movement and left-wing activism, both of which emphasized equal rights. Democratization and coeducation came hand in hand. The new schools were usually introduced without much debate about the (dis)advantages of either comprehensive or mixed schooling (Albisetti et al. 2010). The hidden "injuries" of coeducation for girls were only rediscovered by feminists in the 1980s, after comprehensive schooling had been implemented generally. They cover all aspects of education, and none had remained unnoticed in the past: having to adapt to "boys'" standards of teaching and learning, sex bias in choice of subjects, being subjected to teachers' prejudices about a lesser ability at subjects like mathematics and science, academic underachievement in those subjects, lack of self-confidence in the classroom as against boys' bravado, more traditional sex role development fostered by a male-dominated adolescent subculture, and having to do without female leadership to identify with at a crucial age in the formation of gender identity (Riordan 1990). In the 1990s, a new "boy problem" was recognized, and, as consequence, it began to be argued by some educationists that it was boys rather than girls who were put at a disadvantage by coeducation and the feminization of schooling, much as Hall had argued at the turn of the century (Weaver-Hightower 2003).

Conclusion

Throughout the nineteenth and twentieth centuries in the western world, coeducation in secondary schooling has always been a contested practice. Until the general introduction of comprehensive coeducational schooling in the late twentieth century, school systems were unequal in terms of provisions and money spent. Girls' education was privately organized and paid for, and their schools had curricula that provided few opportunities except for domesticity and motherhood. From the mid-nineteenth century, attempts were made to improve the quality of girls' schools, but governments were reluctant to develop a parallel system equivalent to the boys' public grammar schools. Opening up boys' schools for girls was the exception. At first, only the United States did so; later on, the Netherlands followed. Belief in a traditional "English" education for girls, focusing on the "accomplishments," continued to be strong in Britain and had become firmly entrenched in its White Dominions through the agency of women teachers-entrepreneurs. Next to the English, Protestant model of feminine middle-class education, female religious teaching orders, mostly of French origin, spread a concurrent Roman Catholic model across the globe. The best of these schools valued both intellectual attainment and traditional "female" qualities. Although Catholics feared coeducation theoretically as a dangerous threat to morality, toward the end of the century in Italy, Spain and Portugal parents managed to smuggle ambitious girls into boys' schools. After much feminist campaigning, in the early twentieth century, Germany and France created separate girls' paths leading directly to the prestigious *Abitur* or baccalaureate. The choice for separate schools fitted the more critical perception of mixed schooling of the post-1900 period. Rather than on the merits, such as improved morals and

manners of boys and girls, it focused on the perils of coeducation, particularly on disregarding gender-specific learning styles and the need to fully develop gender identity during adolescence, themes that were rediscovered in the 1980s after coeducation had generally been introduced. These continuities over time in the arguments pro or contra coeducation remind us of the importance to reflect on its history and on the significance of conceptualizations of gender differences for curricula that today are meant to support equal opportunities for all.

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