A Moral Good: The Gendered Differentiation of Working-Class Girls' Education in Britain, 1902-1945

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Abstract

British state-aided elementary education offered the children of the working-classes a path to literacy and self-sufficiency following the Forster Act of 1870. In the years that followed, the curriculum became more robust offering science and mathematics to boys and domestic instruction for girls. By 1902 the dual character of elementary education was established that divided the curriculum by gender. Though seemingly harmless, gender differentiated curriculum ultimately worked to limit educational opportunity of working-class girls. Gender differentiation functioned to give girls less rigorous academic subjects, even if they showed intellectual aptitude, in favor of a timetable which privileged the moral responsibilities of home making and motherhood. Lessons in domestic subjects' instruction were heavily influenced by tenets of Christian faith and tied to formal lessons in religious instruction. Though domestic subjects' instruction was initially scientific in nature, by 1938, the teaching working-class girls received was practical in nature, and lacked most association with science. The subjection of science-based explanations in the curriculum to moral and religious prescriptions marked the character of education that working-class girls received. Instead of educating girls for the world of work between 1902 and 1944, they were educated solely for their future role in the home as wife and mother. It was an important objective for the British state to uphold that moral imperative to preserve the social status quo, as it faced unprecedented social change. It fell to working-class girls to carry the burden of state through their education and into their adult lives.

Acknowledgements

To Aliza Wong and Abby Swingen who thought I could do this in the first place. To Maggie Elmore, who has offered tireless friendship and helpful advice during the writing process. To Nathan Wood and Paul Deslandes who took me on so that I might finish, and to Eve Levin who encouraged me to write this dissertation – thank you is not enough, but I hope it will suffice. For Carolyn Barnard, this was possible because of your support.

This dissertation is dedicated to the memory of Lesley Longley, whose research was key to constructing my own. While she was unable to finish her dissertation on girls' education in Britain, I hope my own honors her efforts and those of the many women who were drawn to her research.

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Chapter 1 Introduction

Background

The educational experiences of working-class Britons between 1902 and 1945 was fraught with disappointments and frustration. For Agnes Cowper, her school life was "neither happy nor pleasant."[1] Lottie Barker's mother had not received a sound education, and was illiterate, but was pleased that her children were able to receive education. Yet the attitude of many working-class families was indifference toward the value of education when wages needed earning.[2] For D.M. Ponton, it was best not to get her hopes up, and instead schooling "disciplined [her] to take the knocks of life from the start."[3] Significantly, these reflections cast doubt on the impact of education and the availability of equal educational opportunity in Britain among working-class girls, in particular due to three interwoven facets of British state-aided education: a curriculum differentiated by gender, the suffusion of Christian morality in girls' curricula, and that schooling for girls' civic role was heavily focused on motherhood.

First, the aim of elementary education almost from its inception, as legislated by the Forster Act of 1870 was unequal for girls as compared to boys by design because educationalists felt that the two sexes had different social functions. In 1883 domestic subjects were introduced into the curriculum as required courses for girls only. In 1923, educationalist William Henry Hadow noted in his report on the *Differentiation of the Curriculum* that

> In regard to differences in social function, we may assume that all children have to be educated with two ends in view:
>
> (i) to earn their own living;
> (ii) to be useful citizens;
> (iii) while girls have also to be prepared

[1] Agnes Cowper, "A Backward Glance on Merseyside" (Birkenhead, UK: Willmer Brothers and Co. Ltd, 1952), 38. 1-181. John Burnett Archive of Working-Class Autobiography, Brunel University. Hereafter, Burnett.
[2] Lottie Barker, "My Life as I Remember It, 1899-1920." 2-37. Burnett.
[3] Mrs. D.M. Ponton, "Autobiographical Letter." 2-629. Burnett.

to be makers of homes."[4]

Boys were given a more academic education from the passage of the 1902 Balfour Act which reorganized elementary school governance into Local Education Authorities. It also allowed for secondary schools to be built using state-funds in return for a percentage of the places remaining open to elementary educated working-class children by scholarship.

Second, girls' education was increasingly tied to the moral underpinnings of Christian belief and was signified by the domination of domestic subjects' instruction through the 1930s to the passage of the Butler Act of 1944. The moral imperative that girls' conduct and training should transform them into thrifty and efficient wives and mothers to fulfill their social obligation as the best exercise of their citizenship was the central goal of their education.[5] Though boys received some religious instruction, theirs was less intensive and took up less of their school week than did that received by girls. Young men needed to know ethics and morals, but it was assumed that young women, who would become mothers, needed a firmer grasp on religious principles to inform how they reared the next generation of British citizens. Across the girls' curriculum, even in their scant science offerings, biology was taught toward a religious end supporting the view of motherhood and family as the order of things in the plant and animal kingdoms, and best realized by humans whom God gifted the ability of absolute love and devotion toward their children.

The third element is that girls' schooling for citizenship or motherhood was bound up in social anxieties which reformers thought could be solved by reforming motherhood itself. Chief among these anxieties was the fear that the British race was degenerating due to the effects of

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[4] William Henry Hadow, *Board of Education Report to the Consultative Committee on Differentiation of the Curriculum for Boys and Girls Respectively in Secondary Schools* (London. H.M. Stationery Office, 1923), 126.
[5] Stephen Heathorn, *For Home, Country, and Race: Constructing Englishness in the Elementary School, 1880 – 1914* (Toronto: University of Toronto Press, 2000).

poor nutrition and poverty brought about by urban industrial capitalism. In 1898, at the outset of the Boer War, upwards of 60% of potential army recruits were deemed physically unfit for military service.[6] Mothers were implicated by social reformers and educationalists for failing to exhibit thrift and industry in providing a sanitary home and cooking nourishing food for their children. This view however glossed over the real effects of poverty and slum living that many Britons endured during the mid to late Victorian era, and these poor conditions persisted well into the twentieth century. It simply was not physically possible for mothers to do better on stagnant wages and in damp, tumbledown slums. Nonetheless, the focus of girls' elementary education was set at solving this problem, combining adequate religious instruction, with housecraft and hygiene courses, that slowly translated into a sort of sex education aimed at improving the British race. For a time, eugenicists were influential in enunciating the view that where working-class mothers could be educated, they should be educated to improve the health of their children through a cleaner home environment, and that they should have more children to replenish the race.

Together these three elements offer a complex view of the intent and impact of British elementary education between 1902 and 1944. Though it may not be surprising that the curriculum was differentiated, intentionally, by sex, what is of note is the permeation of Christian religion through every element of working-class girls' education. This moral superstructure gave legitimacy to the civilizing mission of elementary education as educationalists feared the future of the British nation was at stake. It was just to reform motherhood because working-mothers had revealed themselves to be incompetent when it came

[6] J.M. Winter, "Military Fitness and Civilian Health in Britain during the First World War," *Journal of Contemporary History* v15 no. 2 (April, 1988) pp 211-244, 211.

to raising their children to be healthy and fit members of society. The anxiety at the heart of a girl's education for citizenship was as much about improving domestic outcomes in raising healthy children, by educating basic femininity, as it was about the fear that British masculinity was on the decline, and Empire with it. The only solution was to teach future mothers how to be efficient homemakers and child caregivers so that, by degrees, the crisis of masculinity could be reversed and corrected.[7] As such, this research conducts a sociocultural historical analysis of British elementary curricula used between 1902 and 1944 to interpret how working-class girls were educated to assume a reproductive role in society, both social and biological, to maintain the strength British state in the early twentieth century.

Historiography

The effect of their education is measured by the recollections of school life of British women who left behind memoirs and autobiographies which serve as a significant source base for this research. Through the analysis, religious instruction informed all aspects of girls' curricula in educating them to be loving and competent mothers. Other studies have focused on middle-class and secondary girls' education or on how education had prepared girls for the world of work at age 14.[8] This work focuses solely on working-class girls' elementary education and

[7] T.G. Ashplant, *Fractured Loyalties: Masculinity, Class, and Politics in Britain, 1900-1930* (London: Rivers Oram Press, 2007).; Jessica Meyer, *Men of War: Masculinity and the First World War in Britain* (Houndsmills, UK: Palgrave Macmillan, 2009).; Heather Salter-Streets, *Martial Races: The Military, Race, and Masculinity in British Imperial Culture, 1857-1914* (Manchester: Manchester University Press, 2004).

[8] Josephine Kamm, *Hope Deferred: Girls' Education in English History* (London: Methuen & Co. Ltd, 1965) and Barry Turner, *Equality for Some: The Story of Girls Education* (London: Ward Lock Educational, 1974) discuss middle-class girls' educational opportunity.; Meg Gomersall, *Working-class Girls in Nineteenth-century England: Life, Work and Schooling* (Houndmills, UK: Macmillan Press Ltd., 1997) is broadly about the life of working-class girls in preparation for work in the 19th but not 20th century.; Selina Todd, *Young Women, Work, and Family in England 1918-1950* (Oxford: Oxford University Press, 2005) discusses work and family obligations following schooling.

how and why this curriculum was different from what middle-class girls received or from the education of their brothers or male peers.

Furthermore, it offers a more nuanced interpretation of education for citizenship in that the sources for girls' education highlight social anxieties about the possible decline of British supremacy rather than educating from a position of strength and accomplishment.[9] Girls' education was about catching up to the latest scientific methods in hygiene and in dietetics to stave off the visions of poverty and despair which colored middle-class social perceptions during the 19th century.[10] According to this way of thinking, though men made and maintained empire, it was women and their nurturing and reproductive role upon which the whole endeavor rested.

The focus on working-class students situates this work firmly within the literature of British social history. E.P. Thompson's *The Making of the English Working Class* lay at the foundation of the conception of class formation and class consciousness for this research. It acknowledges Thompson's assertion that "class is an *historical phenomenon*…a thing which happens in human relationships…This relationship must always be embodied in real people and in a real context." And it must consider the relations between groups as their interests are often in opposition to one another and this conflict is where class-consciousness is formed.[11] As such, Thompson's work, and that of Ross McKibbin and Gareth Stedman Jones, enables a historical understanding of class relations through the intermediation of state-aided schools.[12] Collectively, their work enunciates the condition of the working-class in the nineteenth century, and provides

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[9] Heathorn, *For Home, Country, and Race.*

[10] Gertrude Himmelfarb, *The Idea of Poverty: England in the Early Industrial Age* (New York: Alfred A. Knopf, 1984).; Gertrude Himmelfarb, *Poverty and Compassion: The Moral Imagination of the Late Victorians* (New York: Vintage Books, 1991).; Gareth Stedman Jones, *Outcast London: A Study in the Relationship between Classes in Victorian Society* (Oxford: Oxford University Press, 1971).

[11] E.P. Thompson, *The Making of the English Working Class* (New York: Vintage Books, 1963), 9.

[12] Thompson, *The Making of the English Working Class*.; Stedman Jones, *Outcast London*.; Ross McKibbin, *Classes and Cultures: England 1918-1951* (Oxford: Oxford University Press, 1998).

a framework for understanding educationalists and social reformers' initiatives in elementary schools to move away from the social conditions that were so troubling in the 1900s. Again, social history brings to the fore the angst that typified class relations and allows this work to study the struggle for agency in the classed relationships that state education constructed.

In turn, this research contributes to the literature on the social history of girls' education, education for citizenship, and the role of religious instruction in what was thought to be an ever-secularizing society. It contends that the alterations to girls' working-class curriculum were deliberate in their narrowing of this class of girl's future educational and employment prospects by focusing solely on motherhood and that the damage done to the children subjected to it was lifelong and often profound. In a period before the concept of free education for all children, working-class children were made to feel their social inferiority in the design and execution of elementary school curricula and were often unable to break from that educational mold well into adulthood when night school courses became broadly available. This interpretation fills a gap in the literature of girls' education in Britain that has failed to consider the impact of education on the working-class, and its broader social implications in the interwar and post war eras.

The intellectual underpinning of this work is tied to the varied source materials and their form and intent. One set of documents regard the development of elementary curricula denoting national and local educational policy initiatives. These documents are vital to reconstructing girls' elementary school curricula and syllabi and highlight time dedicated to specific studies while offering points of contrast with boys' curricula. These sources clearly demonstrate the tension between secular teaching and Christian influence in the girls' curricula. This tension does not exist to the same extent for boys' education. These documents were primarily housed at three

archives in the UK, The Newsam Library at University College London, The National Archives at Kew, and London Metropolitan University.

The impact of religious instruction on working-class girls' education draws this research into the literature on the secularization of the British populace during the interwar era. By official measures, active church attendance and participation in church sponsored community activities was on the decline in the 1930s.[13] However, popular religiosity and faith remained a strong current in working-class communities in the early twentieth century.[14] Callum Brown has written of a revival of Christian faith in the post-war reconstruction of the 1950s in Britain.[15] Brown's finding of renewed faith pairs well with the intensification and spread of religious instruction provided through 1939 across England and Wales. The work of J.C.D. Clark, Hugh McLeod and Peter Berger all shed doubt on the legitimacy of the secularization theory of religious decline in Britain.[16] In terms of the sources in this project, there was a reactionary impetus to the development and spread of religious instruction syllabi, in part driven by fear of secularization, but more motivated by fear that religious schools that were sold to secular education authorities would leave their pupils without adequate religious foundations. The expansion of Christian education to approximately 93% of British elementary school children by 1939 speaks not of a decline, but an intensification of religious influence.

The expansion of Christian teaching across all aspects of the girls' curriculum is curious because advances in science concurrently influenced the secular curriculum. Instead of a clash of

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[13] Jeffery Cox, *The English Churches in a Secular Society: Lambeth 1870-1930* (Oxford: Oxford University Press, 1982).
[14] Sarah C. Williams, *Religious Belief and Popular Culture in Southwark c. 1880-1939* (Oxford: Oxford University Press, 1999).
[15] Callum Brown, *The Death of Christian Britain* (London: Routledge, 2001).
[16] Peter L. Berger, *The Desecularization of the World: Resurgent Religion and World Politics* (Grand Rapids, MI: William B. Eerdmans Publishing Company, 1999).; J. C. D. Clark, "Secularization and Modernization: The Failure of a 'Grand Narrative,'" *The Historical Journal* 55, no. 1 (March, 2012): 161-194.; Hugh McLeod, *Religion and Irreligion in Victorian England* (Bangor, Wales: Headstart History, 1993).

interests, science instruction was presented as a distinct form of revelation that could support the expansion of religious instruction in the schools.[17] While science education was slow to be added into the girls' curriculum, where it was, in Biology courses, it was presented in terms which supported broad Christian cosmogony. Edith Cooper's *A Science Scheme for Girls* proposed a course in biology based in nature study that gradually revealed to girls' God's Plan for reproduction and emphasized motherlove as the measure of the most evolved species, *homo sapiens*.[18] The cooperation of science and religion is borne out by the work of Anna-Katherina Mayer who argued that during the 1920s science was historicized for consumption by school children so that the work of eminent British scientists was framed as a moral victory of the British state following WWI. Moralizing science was meant to acquiesce to the religious requirement in elementary education while highlighting the intellectual heritage of British science.[19] In this way, science and religion were paired together to teach citizenship and national pride. Further, this alliance sheds more doubt on the probability that there was a real crisis of secularization during the interwar era.

The most illustrative sources for this dissertation research are autobiographies found in two repositories, the John Burnett Archive of Working-Class Autobiography at Brunel University, Uxbridge, and from the Collection of Lesley Longley held at the Newsam Library and Archive at the Institute of Education, University College London. These works offer honest recollections of everyday life between the 1890s and 1930s and include detailed accounts of school life, gender attitudes, and home responsibilities. John Burnett and David Vincent were

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[17] Will Spens, et al., *The Cambridgeshire Syllabus of Religious Teaching for Schools* (Revised Edition, 1939) (Cambridge: Cambridge University Press, 1943).
[18] Edith Cooper, *A Science Scheme for Girls Based on Biological Teaching*, (London: The National Union of Women Teachers, August 1930).
[19] Anna-Katherina Mayer, "Moralizing Science: The Uses of Science's Past in National Education in the 1920s," *The British Journal for the History of Science* 30, no. 1 (March, 1997): 51-70, 54.

early pioneers in the use of autobiographies as reliable source material which gave insights into the rhythms of daily life among the working-classes.[20] Burnett, Vincent, and David Mayall worked together to compile a bibliography of all extant working-class autobiographies in the 1980s, of which approximately 230 make up the Burnett Archive.[21] The Longley Collection at the Newsam Archives is unique because its contents contain surveys and letters to Ms. Longley regarding the impact of domestic science instruction during the interwar years. The replies to Longley's appeals in the press for information from women who were educated between 1920 and 1939 were autobiographical in nature. They provide pointed insights to the kind and quality of education working-class girls received. While Jonathan Rose has legitimated the use of autobiographies in reconstructing the intellectual lives of working-class men, no such work exists for working-class women whose confinement in the domestic sphere has been taken for granted as unenlightened.[22] By using these autobiographies, this research seeks to fill the void in uncovering women's interior lives.

As source material, there are objections to the use of autobiography as a genre because it may not accurately reflect the true memory of an event, or that it may have some ulterior motive, or otherwise skew what historians like to consider to be hard facts. But in their absence, there is no way to accurately reconstruct what people thought about historical events or how events impacted working-class people. While the historian should consider autobiography and the limits

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[20] John Burnett, ed., *Destiny Obscure: Autobiographies of Childhood, Education and Family from the 1820s to the 1920s* (London: Allen Lane, 1982) and *Useful Toil: Autobiographies of Working People from the 1820s to the 1920s* (London: Allen Lane, 1974).; David Vincent, *Bread, Knowledge, and Freedom: A Study of Nineteenth-Century Working Class Autobiography* (London: Europa, 1981).

[21] John Burnett, David Vincent, and David Mayall, eds., *The Autobiography of the Working Class: An Annotated, Critical Bibliography*, Vol. I: 1790-1900 (New York: New York University Press, 1984).

[22] Jonathan Rose, *The Intellectual Life of the British Working Classes* (New Haven, CT: Yale University Press, 2010).; Leonore Davidoff and Catherine Hall, *Family Fortunes: Men and Women of the English Middle Class, 1780-1850* (Chicago: The University of Chicago Press, 1987) discusses the division of spheres of influence between men and women where women were removed to the safety of the domestic sphere leaving men to the politics and competition of the public sphere.

of memory or the written performance of re-remembrance, when taken collectively, patterns emerge that erase intellectual doubt about the veracity of common lived experiences.[23] In this research women's recollections of their schooling all follow common narrative arcs that share enough details in common to establish a baseline of experiences of elementary school curricula. Rather than questioning memory, it is a wonder that women often remembered so much in such detail about their schooling. Though women's recollections and impressions of childhood may have changed as they aged, this is no doubt true of men's autobiographies as well. This is the risk of relying on memory to provide context for social change. Because working-class sources are so scarce, they must be treated methodologically as containing a certain bias that time can impose, but this does not detract from their value as source material and are indispensable for this project.

That working-class women's voices have tended to remain silent across the historical record leads to the theoretical basis for accepting their memoirs as legitimate source material. At the conceptual level, this research is influenced by the literary theory of Mikahil Bahktin which is significant because it rejects elements of linguistic structuralism and emphasizes that language cannot be understood outside of the social context in which it was produced. Bahktin viewed language as an exercise in negotiation between groups in society where conflict, not only consensus, was evident. His work informs the methodology of interpreting the meaning of the autobiographies consulted here whereby the issues of memory that might have affected the recollections of the authors are mitigated by the shared language used and the commonality of experiences across different individuals and time periods. Bhaktin's dialogic heteroglossia provides a basis from which to evaluate the primary source material of this project.[24]

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[23] Jennifer Jensen Wallach, "Building a Bridge of Words: The Literary Autobiography as Historical Source Material," *Biography*, 29.3 (Summer 2006).
[24] Anna Green, *Cultural History: Theory and History* (Houndmills, UK: Palgrave Macmillan, 2008).

An aspect of contention is evident in the autobiographies of working women since their voices have for so long been overlooked in historical texts. It is possible to interpret the process of this silencing through the work of Michel Foucault in *The History of Sexuality.* He argues that the introduction of new vocabularies of specialist knowledge in medicine and psychology that created linguistic forms of power altered discursive structures.[25] Foucault elucidates how these discourses created new social power structures through the promotion of such specialized vocabularies and removed customary expertise from working-class women who had been the holders of ancient folk knowledge. For example, the work of Lisa Forman Cody in *Birthing the Nation* supports Foucault's argument in that prior to the mid-nineteenth century women could hold specialist and revered knowledge such as midwifery, and were more skilled than physicians of the time who were still using Galenic medical principles.[26] Foucault argues that during the nineteenth century, the expansion of education and the growth of the middle-class created a group of new specialists with authoritative and credentialed knowledge. These new specialists had their own vocabularies or jargon to prevent others from assuming their new knowledge which imbued them with power and authority over medicine, psychology, and the law.

The discourse on girls' education in Britain from both middle-class and working-class sources reflects male assumption of expertise over female knowledge by supplanting it with specialist knowledge.[27] This specialist knowledge reduced and eliminated working-women's customary knowledge of biology to the status of folk medicine, something wholly unreliable and illegitimate. The fact that social reformers and educationalists stated that the training working-

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[25] Michel Foucault, *The History of Sexuality, Vol. I: An Introduction* (New York: Vintage Books, 1990).
Lisa Forman Cody, *Birthing the Nation: Sex, Science, and the Conceptions of Eighteenth-Century Britons* (Oxford: Oxford University Press, 2005).
[26] Cody, *Birthing the Nation.*
[27] Ibid.; See also Anna Clark, *The Struggle for the Breeches: Gender and the Making of the British Working Class* (Berkeley: The University of California Press, 1995).; Joanna Bourke, *Working Class Cultures in Britain 1890-1960* (London: Routledge, 1994).

class mothers gave their daughters in housewifery was substandard is evidence that they usurped the traditional roles and obligations of working-women.[28]

In sources produced by educationalists and Parliamentary committees, the education that they believed was best suited to girls of any class was one that was not overly academic and that focused either on mastering social graces or domestic duties associated with marriage and motherhood. The notion that girls should have a scientifically based, academic education like middle-class boys was not even contemplated by most observers and educators of the time. For women, the specialist knowledge that they needed was knowledge of running a house and raising a good and moral family. Apart from that end, girls did not need to learn specialist knowledge and enter into a professional male preserve of knowledge power. As such, gender is viewed through this lens in this research as something that was affected by and determined by vocabulary and access to different levels of knowledge. It was not in Britain's interest as a state to allow women the same educational status as men, even after suffrage was allowed in 1918, and expanded in 1928. The sources of this research reflect this implicit bias that specialist knowledge was the preserve of men, especially as educated women advocated for the same measures as men that would restrict educational breadth and economic opportunity for girls.

Ultimately, this research is about understanding how gender roles functioned and how state elementary schooling codified them. Linguistically, gender signals a binary opposition between male and female, but in reality, it is about power and who in society has access to it, as Joan Scott has argued.[29] This work studies the ways in that gender difference was taught and modeled for the subset of society which had the least power, working-class females.

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[28] Hadow, *Differentiation of the Curriculum for Boys and Girls*, 72.
[29] Joan Wallach Scott, *Gender and the Politics of History*, revised edition (New York: Columbia University Press, 1999), 42.

Paradoxically, the least powerful persons in British society were tasked with its salvation through the content of their domestic and religious instruction courses. By utilizing their reproductive power for the state, working-class girls were made into the most influential people in British society, but it may have been an unevenly adopted status given the changes that were occurring in Britain in the interwar era, socially and culturally. Pairing working-class history with gender history allows for the examination of the agency and power ascribed to working-class girls. This negotiation was self-contradictory, giving the least the most power, but only within the domestic sphere which was customarily removed from real political influence. Mary Poovey's work *Uneven Developments* highlights such contradictions in the construction of middle-class Victorian femininity, which the working-class girl was taught, with some alterations, to emulate.[30] Poovey's work brings to bear the ways that discourse operated to constrain yet elevate the symbolic status of women, and it is this particular social construction that was foisted upon working-class girls when they were taught how to save their race, one infant at a time.

There has been much work done on women's history in Britain since the 1970s. Davidoff and Hall's *Family Fortunes* gives conceptual foundations with the notion of public and private spheres of influence and how women were protected from politics and the competition of capitalism from within the home. The removal to the domestic sphere meant the adoption of the concept of social respectability which required husbands to work and women to run the home and raise the children in sound moral principles. However, working-class women were often depicted as disrespectable because they had to work to supplement their husband's wage, or were widowed, or were otherwise poor and could not provide the right home environment for their children. Gertrude Himmelfarb has written about the middle-class fascination with aiding women

[30] Mary Poovey, *Uneven Developments: The Ideological Work of Gender in Mid-Victorian England* (Chicago: The University of Chicago Press, 1988).

in poverty in *Poverty and Compassion* and the social judgement of the poor character of such women whose personal piety was found lacking due to their own poverty.[31] Ellen Ross's *Love and Toil* has depicted the struggles working-class mothers faced to raise their families, and to keep them respectable, in spite of poverty.[32] Elizabeth Roberts has conducted oral histories of working women to reveal more about their thoughts and familial obligations in *A Woman's Place.*[33] Roberts wrote that "the patriarchal model tends to stress the negative aspects of women's lives, and thus, I believe distorts the true picture…"[34] In this regard, it is clear that the prevailing middle-class view of femininity, motherhood, and respectability leave out much important detail of what constituted the whole of working-women's lives. Roberts' work illuminates why it is vital to consider the voices of working-class women themselves when confronted with competing visions of domesticity and respectability, as this research is.

Meanwhile, other histories of mass education in Great Britain have been institutional surveys, examining elite schools, or legislation and its innovations, but lack any substantive information on curricula or what working-class students actually learned. Among these works are histories of education or sociological studies of education and the application of past problems or presumptions of inequality on modern day educational policy and curriculum development.[35] The sociologies of education which bear upon the central questions of this

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[31] Gertrude Himmelfarb, *Poverty and Compassion*.
[32] Ellen Ross, *Love and Toil: Motherhood in Outcast London 1870-1918* (Oxford: Oxford University Press, 1993).
[33] Elizabeth Roberts, *A Woman's Place: An Oral History of Working-Class Women 1890-1940* (New York: Basil Blackwell, Inc., 1984).
[34] Ibid., 2-3.
[35] Felicity Hunt, *Gender and Policy in English Education: Schooling for Girls 1902-1944* (New York: Harvester Wheatsheaf, 1991).; Andreas M. Kazamias, *Politics, Society, and Secondary Education in England* (Philadelphia: University of Pennsylvania Press, 1966).; Roderic Donald Matthews, *Post-Primary Education in England: A Study of the Relation of the Board of Education to the Provision for Post-Primary Education in England, 1902-1929,* Dissertation (Philadelphia: University of Pennsylvania Press, 1932).; Jane Purvis, A History of Women's Education in England (Milton Keynes, UK: Open University Press, 1991).; John Roach, *Secondary Education in England 1870-1902: Public Activity and Private Enterprise* (London: Routledge, 1991).

research are feminist treatments of gender inequality and its perpetuation upon current secondary science education. Where there are historical elements to the arguments of June Purvis, Felicity Hunt, or Rosemary Deem, they are contemporary critiques of educational policy and provision detailing how women have always been unequal when it comes to educational opportunity.[36] While these studies have value in affecting future policy, they do little to elaborate on the experiences of former students themselves, and as Elizabeth Roberts has shown, the history of women without their own input, is incomplete. This research seeks to restore the experience of girls in British elementary education between 1902 and 1944, in their own words.

Chapter Overview

In this work, Chapter 2 discusses the impact of the expansion of religious instruction curricula on working-class girls. It argues that all the curricula of working-class girls was influenced by Christian morals, and was promoted to combat the social anxieties behind the problem of persistent poverty and the threat of secularization. Chapter 3 investigates the general education elementary curriculum for both boys and girls and focuses on how boys were given a more academic education with access to science courses whereas girls got limited science education. For girls, their timetable contained very little science, and what science was given was paired with religious teaching on motherhood and motherlove. Chapter 4 discusses the formalization of courses of domestic instruction for all girls, and how working-class girls were given increased lessons as they neared school leaving age that focused on housecraft or housewifery. Over time, their domestic subjects' instruction became less scientific and more

[36] Rosemary Deem, ed., *Schooling for Women's Work* (London: Routledge and Kegan Paul, 1980).; Felicity Hunt, *Gender and Policy in English Education.*; Alison Kelly, Ed., *The Missing Half: Girls and Science Education* (Manchester: Manchester University Press, 1981).; Jane Purvis, A History of Women's Education in England (Milton Keynes, UK: Open University Press, 1991).

vocational in character, and it limited the sort of work girls could enter after leaving school. Chapter 5 focuses on attempts to introduce sex education into the curriculum at various stages in the interwar years, and how teaching evolved from a moral overture for girls to be wary of boys and stay pure, to a eugenic imperative to preserve the race, to sound teaching on the implications of sex and conception by the end of WWII. The problem however was that very few schools actually taught sex education at all, and most fell into the moral variety, not a scientific one – further demonstrating the influence of Christian ideals in girls' curricula. Chapter 5 presents the autobiographical accounts of educational experiences of working-class women who were at school between 1902-1944. Their recollections relate how the religiously framed courses of domestic instruction impacted them and what they learned. Most accounts discuss how much more time was given to domestic subjects than liberal arts subjects, and how they felt the lack of a proper education in adulthood. Many stated that their ability to seek employment was impaired or limited by the kind of education they received and that it little prepared them for the life they actually led. Theirs is an indictment of an educational system riven with class and gender bias that was intended to promote the status quo, not educational opportunity.

Chapter 2 The Heart of British Elementary Education: Religion

Introduction

For twelve-year-old Nora Hampton, the mornings at her new school, the higher elementary school in Dudley, began with the same pleasant exercise of corporate worship. The headmaster took his place at the head of the Central Hall and read bible verses to his pupils – the boys sat on one side of the Hall, and the girls on the other. Then, the headmaster led them in singing hymns like "New every morning is the Love, Our waking and uprising prove, Through sleep and darkness safely brought, Restored to Life and power I thought."[1]All across Britain, the morning assembly was much like Nora's recollection, because whether recognized or not, the history of British education is the history of religious education in Britain.[2] Indeed, as the authors of the Cambridgeshire Agreed Syllabus for religious teaching wrote "all education rightly conceived is religious education."[3] Though elementary education came to encompass subjects beyond the 3Rs and religion, religious instruction colored the secular instruction that all students, but especially girls, received, with a moral gloss that was the at heart of the schools' mission, especially in the interwar years during a concerted effort by the church to reintroduce formal religious instruction into schools, following WWI. Now, it was not enough to educate children in science or history, but to draw into it a connection to God and moral ethics. Analysis of courses

[1] Nora Hampton, "Memories of the Baptist End of Netherington, Dudley, in the period 1895-1918," 34-35. 3-68. John Burnett Archive of Working-Class Autobiography, Brunel University Library. (Hereafter, Brunett).
[2] A.C.F. Beales, "Religious Education in England: Past, Present, and Future" (Jan/Feb 1943), 19. Papers of Parent Teacher Association, LC 368, Trades Union Congress Collection, London Metropolitan University Archive (Hereafter, MET).; *Church Assembly Report of the Commission of Religious Education Appointed by the Archbishops of Canterbury and York*, (Westminster: Board of the Church Assembly, 1929), 41. Papers of Parent Teacher Association, Trades Union Congress Collection, LC 368. MET.; Thomas Walter Laqueur, *Religion and Respectability: Sunday Schools and Working-Class Culture 1780-1850* (New Haven, CT: Yale University Press, 1976).
[3] Will Spens, et al., *The Cambridgeshire Syllabus of Religious Teaching for Schools* (Revised Edition, 1939) (Cambridge: Cambridge University Press, 1943), 9.

in the curriculum clearly demonstrates how Christian morals informed all aspects of the secular curriculum in British elementary education. But before we can undertake such analysis, it is first important to understand the forces that shaped the development of religious instruction in elementary schools.

Historical Background

From its earliest inception, education favored the privileged. Only elites who could afford pay a tutor to teach their sons how to be noble lords, churchmen, or barristers had access to it. In Britain, as elsewhere in Europe, colleges appeared in the twelfth century, and over time, preparatory schools began to educate the sons of nobles and wealthy people for entrance into these universities. The first of these, Winchester, was founded at the end of the 14th century, with the other seven major public schools being founded by the end of the 16th century. During the Medieval and Early Modern period, education of the masses was limited and only attempted by religious orders of the Catholic Church, and later the Anglican and non-conformist churches (Methodist, Unitarian, Baptist). Eventually, education for the poor arose to give young boys the basics of reading and arithmetic, and a sound foundation in catechism.[4]

It was not as common to educate girls until the end of the 18th century, whether by the wealthy or by church ventures. If the wealthy did educate their daughters, they paid private tutors or governesses to teach them social graces, the essentials of literature, writing, singing, dance, and piano or another instrument. A girl's education was meant to make her attractive to a potential husband rather than to provide any practical academic training. Parents considered that this training gave girls proper accomplishments to compete in high society.[5] Consequently,

[4] William Henry Hadow, *Board of Education Report to the Consultative Committee on Differentiation of the Curriculum for Boys and Girls Respectively in Secondary Schools* (London. H.M. Stationery Office, 1923), 3-5.
[5] Ibid.

systematic education for poor girls was virtually unheard of until the advent of the Sunday School movement in the late 18th century.

In response to rapid industrialization, and the effect of enclosure which forced the poor off the land and into urban factories, there was a general sense among elites that working-class children needed basic instruction and grounding in Christian faith in order to stave off the collapse of society to the mob.[6] The response was the Sunday School movement, which sought to provide weekly instruction in basic literacy and biblical tenets to act as a stop-gap to social decay and anarchy. In his assessment of the impact of the Sunday Schools, Thomas Laqueur views them as the beginning of mass education in Britain.[7] Until 1870, all mass education was provided by churches and benevolent societies such as the British and Foreign School Society which was founded by Andrew Bell in 1808, and the National Society for Promoting the Education of the Poor in the Principles of the Established Church, founded by Joseph Lancaster in 1811.[8] Both of these societies operated on a monitorial system in which a Head Teacher was assisted in teaching a large group of students (up to 500) by older students who reinforced reading, writing, and arithmetic, the 3Rs, by rote and drill. Other Christian denominations began offering similar instruction, for a fee, based on individual denominational formularies and catechism. It is important to emphasize that until 1870, the education of the masses had always been a venture carried out by religious bodies from the Middle Ages

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[6] E.P. Thompson, *The Making of the English Working Class* (New York: Vintage Books, 1963).; See also Jeffery Cox, *The English Churches in a Secular Society: Lambeth 1870-1930* (Oxford: Oxford University Press, 1982) on diffusive Christianity in education, 94-97.; Mass Observation, *Puzzled People: A Study in Popular Attitudes to Religion, Ethics, Progress, and Politics* (1947; repr., London: Faber and Faber Ltd., 2009), 88.

[7] Laqueur, *Religion and Respectability.*

[8] William Henry Hadow, *Board of Education Report of the Consultative Committee on the Education of the Adolescent* (London: H.M. Stationery Office, 1926), 2-3.

In the 1840s and 1850s, spurred by the increasing pace of industrial innovation and technological advance, as exemplified in the Great Exhibition of 1851, the ancient private schools began to grapple with the introduction of science and advanced mathematics, and modern languages into their traditional liberal, classical curriculum. Rugby School, under the leadership of Thomas Arnold, and then Dr. Archibald Tait, was the first to offer physics courses in its Modern department.[9] "Modern" became the appellation for subjects connected to industry and commerce which departed from the literary nature of training in Greek and Latin grammar and the great texts of those civilizations. Though slow to catch on with the nobility, the sons of the rising middle-class of merchants, factory magnates, and financiers drove demand for more "modern" courses.

Similarly, during this interval, higher education for middle-class and elite girls rose in demand. In 1843, the Governesses' Benevolent Institution was founded to standardize the education and attainments of young women who would teach the daughters of elite families.[10] In 1849, Queen's College, Harley Street was founded and it offered courses for women in "English, French, Latin, Italian, History, Geography, Natural Philosophy, Methods of Teaching, Theology, Vocal Music, Harmony, Fine Arts, and Mathematics," all taught by specialist instructors.[11] Two alumna of Queen's College, Miss Dorothea Beale and Miss Frances Buss, believed that girls should be offered a secondary education on par with boys. Miss Buss testified in 1865 for a Parliamentary Commission "a girl's education should not differ from that of a boy of the same rank of life with regard to the subjects which were taught…I am sure girls can learn anything they are taught in an interesting manner and for which they have the motive to work."[12] Both

[9] Hadow, *Differentiation of the Curriculum for Boys and Girls*, 7-9.
[10] Ibid, 24.
[11] Ibid.
[12] Ibid., 24-25.

women went on to reorganize or found ladies' colleges. Miss Beale reorganized the Ladies' College at Cheltenham in 1858. Her curriculum included history, English literature, elementary mathematics, and physical science inclusive of elements of physics, botany, and physical geography, and French and German to be taught in lieu of Latin.[13] "I think it is good for boys and girls to have similar tastes," she wrote, "[and] be interested in the same things."[14] Miss Buss founded the North London Collegiate School in 1850, and built a curriculum based on English language (elocution) and literature, elementary science courses, arithmetic, geometry, algebra, French, Latin, drawing, singing, instrumental music, and plain needlework.[15] In looking back upon their curricula, the authors of the 1926 Hadow Report on the *Differentiation of Curriculum for Boys and Girls,* argued that the bold program in equal education for girls was based on imitation of boys curriculum adapted from the ancient private schools. They observed that Beale and Buss based "their policy on the belief that girls could equal boys, at least in intellectual matters," but that their error was that they "implicitly assumed that what had been done for and by boys was in general suitable for both sexes."[16] The authors of this Report found that it was inappropriate to educate boys and girls in the same way or even teach them the same subjects. Thus, by the interwar era, educational elites insisted on a gendered differentiation in educating girls that at least some of their forebears nearly a century before had not seen as necessary.

While it was an important development that middle-class and elite women had access to higher education, this outgrowth was long in translating to access for the working-class girl. In 1870, The Forster Act established state-aided elementary education for all children between 5 and 14. While supported through local taxes, the education provided was not free until 1891.

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[13] Ibid., 26.
[14] Ibid., 27.
[15] Ibid., 25.
[16] Ibid., 26-27.

Parents had to pay a small fee of a penny to three pence a week per child. In the early days, the monitorial system of Lancaster and Bell served as the basis for educating working-class children. Teaching was basic in reading, writing, and arithmetic, with some history and needlework for girls and boys. During this period, the school leaving age was 11 years, but many children received exemptions to leave earlier to go to work and receive part-time education in the factories where they worked. A crucial and controversial aspect of the 1870 Act was the Cowper-Temple clause, which stated that "no religious catechism or religious formulary which is distinctive of any particular denomination shall be taught in [any] school,"[17] that received over half of its funding from local rates. In consequence, the Act of 1870 created a dual system of education in Britain: one half state aided, but non-denominational, and the other half voluntary Church operated, with denominational teaching, but with only partial state funding which made them fee-charging. Funding for all state-aided and voluntary elementary schools was tied to the Cowper-Temple clause. For example, parents who preferred to send their child to a church school not only had to pay fees for their child to attend, but also had to pay out of their taxes for the maintenance of local state-aided public elementary schools. Many parents felt the double financial expenditure as an imposition on their civic and religious liberty. Nonetheless, the religious settlement of Cowper-Temple stood throughout the period of this research through 1944, and guaranteed that state aided elementary schools would retain the moral character and mission of educating the children of the poor in Christian principles. Further, it ensured that a focus on working-class children's moral development was as important, if not more so, for girls like Nora Hampton, than the rigor of academics in the curriculum.

[17] Derek Gillard, "Forster Act 1870," in *Education in England: a Brief History*, http://www.educationengland.org.uk/history/chapter06.html#02, Section 14:2.

Over time, the impact of the financial effect of the Act of 1870 began to overtake many church schools. The Act of 1870 did provide a 50% maintenance grant to church schools, to maintain buildings in existence, but would not provide any money to build new schools out of the rates. The problem was finding the remaining money to maintain or replace school buildings and provide adequate books and furnishings for students out of the fees paid and by church tithes, and endowments. In the late 19th century, church attendance was down across all denominations, and by 1891, church schools were losing students to state-aided elementary schools which were now provided free of charge to parents.[18] In 1897, the government raised the rates to 5 shillings per scholar for every voluntary school.[19] However, given that the state-aided curriculum had expanded to include science and the arts as well as domestic subjects, the rate increase for church schools was inadequate to provide parity with fully funded schools making their buildings woefully inadequate in size, and condition, and their supplies insufficient to compete.

The Legislative cause for the expansion of Religious Instruction

Under the Balfour Education Act of 1902, provision was made for the transfer of Church schools to the newly formed Local Education Authorities (LEAs) under a lease system, with terms of 20 years, local authorities would take up the maintenance of the church school but use it for secular instruction and run it as another state-aided elementary school. The church could use the building at certain times during the week as a condition of the lease that was not associated

[18] Gillard, "The Education Act of 1891," in *Education in England: a Brief History*, http://www.educationengland.org.uk/history/chapter06.html#02.; On religious decline and secularization see Cox, *The English Churches in a Secular Society*.; Callum Brown, *The Death of Christian Britain* (London: Routledge, 2001).; Sarah C. Williams, *Religious Belief and Popular Culture in Southwark c. 1880-1939* (Oxford: Oxford University Press, 1999).

[19] Gillard, "1897 Voluntary Schools Act" in *Education in England: a Brief History* http://www.educationengland.org.uk/documents/acts/1897-voluntary-schools-act.html.

with the function of the school. Once schools were transferred to the LEA, they could no longer provide denominational religious instruction. However, local agreements were made that would exempt children who still wanted denominational teaching from attending the school during religious instruction and instead would allow them to attend a church or other off-site location to receive denominational instruction, and not be counted absent from school. Funding for state-aided schools was tied to attendance, so it was an important distinction to be made whether the school day timetable included the time spent in the mornings on religious instruction, or began afterward, with secular or academic instruction. Board of Education Circular 512 allowed LEAs to make their own by-laws on this matter, as a sort of settlement permitting the transfer of church schools into LEAs, while allowing the students to take religious instruction off school premises and then return when regular classes were to begin and still be marked present in the school registers.[20]

The Education Acts of 1918 and 1921 effectively ended this settlement. These acts ended the majority of exemptions for students from school attendance, and included time spent on religious instruction as a part of the school day, affecting when school registers could be marked and how attendance for aid was counted.[21] What this meant was that all state-aided schools could not encourage denominational instruction even if they had been transferred, and their time table could not be marked with any reference to optional church attendance in lieu of religious instruction offered at the school. The whole school day, from open to close was the term in which the child had to be present, and there was no further distinction between religious and secular instruction in the timetable – all parts of the school day were considered the same from

[20] Board of Education, *Circular 512*, July 19th, 1904. ED142/39. The National Archives, Kew. (Hereafter, TNA).
[21] David Parker, "'Stand Therefore!' Bishop Michael Bolton Furse, the Diocese of St. Albans, and the Church Schools Controversy, 1919-1939." *History of Education Quarterly* v39 no2 (Summer, 1999), 165.

the perspective of the register keepers and the LEA. The acts also required that LEAs provide advanced instruction to older students which gave rise for the need to expand religious instruction to interest and stimulate older students. By 1925 when the effects of these changes began to be felt, during the time of the National Strike, the Board of Education admitted that Circular 512 was obsolete and any local by-laws based on it required revisions made to comply with the law.[22]

The reason why this was such an issue for church schools was a combination of factors based on the settlement of 1870, and the Cowper-Temple requirement that no state-aided school support denominational religious instruction. First, was the continued deterioration of church schools, especially following WWI when public focus and money were directed toward fighting the war. In the early 1920s, one-hundred Church of England schools a year were being transferred over to LEAs under leases for maintenance of the buildings.[23] Circular 512 had provided a legal loophole to allow students who still attended those schools to attend church rather than the nondenominational religious instruction their schools now provided via the Anson By-Law that individual LEAs could adopt. But without 512, it was less clear how exemptions for religious observance would be treated, and the fear was that children would be subjected to ungodly instruction by untrained teachers who were not given religious instruction courses in most training colleges, or even required to be a Christian.[24] Secularization and the decline of the role of the church in the average person's life was not a new phenomenon, but its effects were

[22] Letters and Correspondence of the London County Council on Religious Instruction, 1925.; Press clipping, "An Obsolete Circular," *The Times*, February 10, 1926. ED 106/23 Religious Instruction, LCC. TNA.
[23] Parker, "Stand Therefore! Bishop Michael Bolton Furse, the Diocese of St. Albans, and the Church Schools Controversy, 1919-1939." 166.
[24] Conscience clauses protected teachers in state-aided schools from having to be a Christian to be a teacher. In the 1930s it became more widespread of training colleges to offer courses on how to teach religious education, and for the Board of Education to offer short courses for teachers to receive further training in the 1940s.

not uniform nor all-encompassing of British society.[25] Though churchmen feared their congregations were becoming more like heathen, the reality is that religiosity continued to hold more people than it did not, even if church attendance was in decline, belief was not.[26] Next, the austerity of state spending in the 1920s and 1930s due to a series of economic depressions meant that church schools again had to cope with less income to support their facilities, and that state-schools poised to build and expand had to delay their plans until the mid-1930s. Building new central schools and improving old schools as per the guidance set forth in the 1931 Hadow Report was attempted where there was enough money, but usually delayed due to the Great Depression.[27] Third, the rise of communism and fascism, and undemocratic governance in Europe following World War I was an existential threat to democratic Christendom. In a 1941 report on Religious Education in Wiltshire, the committee found that:

> This is a time of urgent spiritual and intellectual crisis. The power which has been acquired by pagan dictatorships is not only a menace but a sign. It has involved a dogmatic claim to obedience in an age of uncertainty and bewilderment which has ensued on the weakening of authority in religion, and on the disillusionment of those who have tried to replace religion by the creed of scientific humanism, proclaiming sufficiency of man to shape his own destiny without the aid of any force above him.[28]

Given this fear of rampant secularization and atheism, educationalists and churchmen joined forces to develop religious instruction syllabi based on the latest advances in Biblical Criticism.[29] The result was a rapid transition from a hodge podge of nonexistent, or limited religious

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[25] Cox, *The English Churches in a Secular Society*, and Brown, *The Death of Christian Britain*
[26] Williams, *Religious Belief and Popular Culture in Southwark.*
[27] Many reports in the NUWT papers cite that plans to build new or refit older schools were delayed in the 1930s. Institute of Education, University College London, Newsam Library and Archives.
[28] C.T. Dimont, Chairman, "Reports of the Two Committees of Enquiry into Religious Education, Diocese of Salisbury," (Salisbury: Bennett Brothers, 1941), 6. UWT/D/28/36 Religious Education 2 of 3.
[29] Education for Citizenship became tied to Religious instruction in the 1940s – "Religious Training in Council Schools, Statement by Local Clergy and Ministers: Educational Aim to Produce Good Citizens," *Todmorden Advertiser*, July 3, 1942. Cites the war as a reason to defend Christian faith and democratic ideals. Religious Instruction, Todmorden. ED 106/17. TNA.; Jeffrey Cox, in *The English Churches in a Secular Society* indicates 1902 as the high point in church attendance in Lambeth, London, 47.; Callum Brown, in *The Death of Christian Britain,* has argued that it was 1904-1905 that saw the highest point of church attendance in Britain the twentieth century, 7.

instruction guidance to a comprehensive, thorough set of agreed syllabi in religious instruction that read more like theology lessons for college students than a scheme to teach elementary students from ages 5-14. The impetus for the standardization and increase in breadth of content for religious instruction was in the rescinding of Circular 512 and the churches' need to ensure that if children could not leave school for denominational teaching, that the religious instruction they got was correct and focused on citizenship using the newest insights to promote their agreed views on Christianity. Agreed Syllabi were the stop-gap which stabilized British education during the interwar years, and as time went on, unified it under a common sense of faith, Christian ethics, and civic responsibility which the children were ever increasingly taught.

Analysis of Agreed Syllabi of Religious Instruction

Almost spontaneously, churches and allied associations across Britain were up in arms about the status of transferring church schools to the LEAs without any assurances for religious instruction apart from bible reading, minimal bible teaching, school prayers and assembly with hymns.[30] The Archdeacon of Lewes in Sussex, H. M. Hordern expressed his concern at a Diocesan Council meeting covered by the local newspaper *The Sussex Express*,

> This Diocesan Council, being convinced that there can be no just settlement of the religious question in schools where attendance is compelled by the State, until provision is made for all children to be brought up in their own religion, urges the Government to consider the policy of providing 'denominational' as well as 'undenominational' schools…The Council resolves to request that the Local Education Authorities of Sussex…to adopt the Anson By-Law, whereby children of different denominations may be taught their own religion in school hours, outside school buildings…But seeing that the Church Schools are at present the only schools where the children of the Church may be brought up in their own religion, the Council urges the church people of Sussex at

[30] Report, Religious Instruction in Public Education: Eight Years' Progress, Council of Christian Education, 2., 1937. Papers of the Assistant Masters Association, AMA/E/2/1, Institute of Education, Newsam Library and Archives, University College London. (Hereafter, Newsam).

> once to raise by loan or by gift a sum sufficient to assist local effort in building and maintaining in highest efficiency the Church Schools of the Diocese.[31]

The Archdeacon's plea was to reinstate the Anson By-Law which had previously allowed students to attend denominational church services during school hours while non-denominational instruction was being given. His only resort in facing this problem was to appeal for funds to build and fund new church schools at a time when depression and impending strikes made that quite untenable. His outrage, mirrored across the country, resulted in a new agreement, a Concordat, which initiated the compilation of ecumenical syllabi of religious instruction which became increasingly popular by the late 1920s.

Such meetings occurred in nearly every county in England between the Church of England, Free Churches, universities, training colleges, and teachers regarding developing agreed syllabi to be drawn up and used in that county's schools. Examples include, Oldham, Hampshire, Cambridgeshire, Middlesex, Manchester, Oxfordshire, and West Riding Yorkshire, which all drafted religious instruction syllabi to standardize religious instruction beginning around 1922.[32] As the popular will was high to solve the religious instruction problem, the syllabi drafted offered varying degrees of detail, but grew more comprehensive over time. The authors of each syllabus made clear that these documents were by no means a set curriculum with state sanction, but instead offered a range of potential topics to be taught and ways to teach them to suit the needs of various kinds of schools whether rural or urban, elementary or secondary.[33] Later syllabi included guidelines for religious instruction to the age of 18 in

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[31] "Religious Education in Schools: Discussion at Diocesan Council," *The Sussex Express,* October 17, 1924. The British Newspaper Archive. https://www.britishnewspaperarchive.co.uk/viewer/bl/0000655/19241017/182/0008.
[32] Religious Instruction, Papers of the National Union of Women Teachers, Agreed Syllabuses, UWT/D/28/19. Newsam.
[33] The Cowper-Temple clause did not apply to secondary schools under the law. They were encouraged to give some religious instruction, but it was not regulated to the extent that elementary was. Some schools might have the minimum daily assembly and maybe two hours per week for boys' schools or offer far more time for girls in secondary schools. It all depended on the school and locality.

accordance with the 1921 Education Act, which stated that LEAs were responsible for providing advanced courses for older pupils.[34] In each county, the solution to the problem was either to forestall the transfer of church schools to LEAs or accept the adoption of a Concordat between religious bodies and the LEAs stipulating the terms of transfer of church schools and formalized by the adoption of agreed syllabi across all elementary schools.[35] In particular, the settlement and adoption of the West Riding Concordat, was a guide for other LEAs and councils on crafting by-laws that solved the issue that the revocation of Circular 512 had caused:

> West Riding Concordat, Section 1, clause xiv: Religious instruction in accordance with the Syllabus approved by the County Council shall be given in all Council (including Transferred) Schools daily between 9 a.m. and 9:30 a.m. In Schools transferred under this arrangement religious instruction in accordance with provisions of the Trust Deeds may be supplied by the Trustees on two days of each week to be mutually agreed upon to the children of such parents as may express desire to have it, the instruction being given by some person or persons appointed by the Trustees, and the Trustees will have responsibility for all expenses incurred: provided also that if the Trustees so elect, they may provide such last mentioned religious instruction between such hours in some other place [than the school].[36]

The West Riding Concordat not only gave validity to its Council's Agreed Syllabus, but also made provision for children in transferred church schools to resume denominational religious instruction without affecting the registers of attendance or grants from the Board of Education. Between 1926 and 1929, the success of the West Riding Concordat was carried nationally. Regional papers were full of information on the progress other councils adopting their own Concordats and resettling the issue of the Dual system for another interval through the adoption

[34] Syllabus of Religious Instruction, County Council of the West Riding Yorkshire Education Department, March 1947. (Cambridge: Cambridge University Press, 1947), 46-83.
[35] "Teaching Creeds at Central School," *The Bromley Mercury*, December 16, 1927, press clipping, ED 106/13 Bromley Religious Instruction, TNA.; Lancaster Church of England Diocese were for delaying transfer or ending it altogether. Press Clipping, "Church Schools, Defence Association Formed, Meeting of Lancaster and Tunstall Deaneries," *Lancaster Observer*, December 24, 1926. ED 106/15, Lancaster LEA Religious Instruction. TNA.
[36] The West Riding Concordat, May 2, 1930. ED 106/42 West Riding Religious Instruction. TNA

of the Butler Education Act in 1944 which made religious instruction compulsory in secondary schools as well.[37]

Prior to the innovation of the Agreed Syllabi in religious instruction, the type and duration of instruction varied greatly and was usually left to the discretion of the headmaster or mistress of each school. An interesting feature of a proposed syllabus for a boys' elementary school authored by Mr. Ernest Melles for a 1925 competition held by the *Daily Mail* newspaper, which was and remains the second most popular national daily newspaper in England after *The Times,* was that religious instruction for boys was more basic and limited than it was for girls.[38] This is by no means a mistake, as Callum Brown argues that piety was feminized in the early 1800s, and this change allowed men to take part in the public sphere of wage earning, while women became angelic symbols of the heart of the home.[39] Mr. Melles' proposed syllabus for boys' schools reveals the following pattern: [40]

Table 1: Religious Instruction in a Boys' School Proposed Syllabus

Subject	Form	Content/Skills	Periods Per Week	Duration per week
Religion	I & II	Prayers, Assembly	5	75 min
Religion	I & II	Bible Study Old and New Testament	2	60 min
Religion	III & IV	Assembly, Hymn	5	75 min
Religion	III & IV	Bible Study Old and New Testament	2	60 min
Religion	V-VII	Hymn and Assembly	5	75 min
Religion	V-VII	Bible Study, Old and New, Moral instruction	2	60 min
Religion	Ext VII	Assembly, Hymn	5	75 min
Religion	Ext VII	Bible Study, Old and New, revelation and spiritual truth	2	60 min

[37] TNA ED 106 series documents each county's response to this issue of the adoption of Concordats to revise the terms of transfer of church schools and the concurrent writing of dozens of agreed syllabi across England during the 1920s. Included are press clippings on changes post Circular 512 revocation.
[38] Michael E. Sadler, *Our Public Elementary Schools* (London: Thornton Butterworth Ltd, 1926), 61-70.
[39] Brown, *The Death of Christian Britain*, 58-59.
[40] Sadler, *Our Public Elementary Schools*, Ibid.

Here, the main purpose of the boy's religious education was corporate worship and prayer. In fact, the major Agreed Syllabi written in the 1920s and later revised, emphasized the power of inculcating a sense of corporate Christian identity which would pervade the life of the school and be infused into the academic subjects.[41] This period was for the first 15 to 30 minutes of each school day, and was known as school Assembly. Virtually all elementary schools in Britain began the day with this kind of corporate worship, just as Nora Hampton's school did. The second component of the boys' religious education was two thirty-minute periods a week to develop the boys' knowledge through bible study. Bible study often meant rote memorization of key verses, to allow a more sophisticated application of Christian principles to moral and ethical life outside of the school. Melles and most educators of his time thought that this syllabus timetable would allow the boys to learn enough religious instruction to make them good citizens on leaving school. But what Mr. Melles had in mind for each phase of religious instruction is unclear, and was left to the discretion of those who would follow his syllabus for all subjects in boys' elementary schools.

In stark contrast, was Helen Dobson's syllabus for the ideal girls' elementary education, which won the prize for the girl's syllabus offered by *The Daily Mail*, provided much more depth in what content girls would be taught during religious instruction: [42]

Table 2: Religious Instruction in a Girls' School Proposed Syllabus

Subject	Age	Content	Duration Per Week
Religious Knowledge	9-10	Biographies of OT characters, NT facts of the life of Christ; learning scripture by memorization – 20 Psalms and portions of Sermon on the Mount	2 hr

[41] Spens, et al., *The Cambridgeshire Syllabus of Religious*, 9-21 – Chapter on the importance of Corporate Worship.; Syllabus of Religious Instruction, County Council of the West Riding Yorkshire Education Department, 2-10 – section on Corporate Worship.
[42] Sadler, *Our Public Elementary Schools*, 71-90.

Religious Knowledge	10-11	History of the Israelite nation from Abram to Solomon; Social life 1 AD – village life, the synagogue and temple, feasts and fasts; The life of Christ in Luke; Memorize poetic parts of OT, parables	2 hr
Religious Knowledge	11-12	Biblical History from Solomon to the Exile; History of the Early Church, St. Paul and St. Peter; memorize selected Psalms, Proverbs, verses of Isaiah, the Sermon in Acts	2 hr
Religious Knowledge	12-13	Up to this point, religious instruction should have been purely unsectarian; From this point, girls should be instruction in the truths of the Christian faith.	2 hr
Religious Knowledge	13-14	Continuation of instruction in the truths of the Christian faith.	2 hr

This syllabus reflects a definite gender bias in comparison to Mr. Melles' syllabus, because here, there is detail on what girls should know about Christianity and Jesus in particular. The girls learned about the great patriarchs and key figures in New Testament theology to learn the ethics of the faith. Then Dobson emphasized the Life and example of Jesus to teach girls the moral ideal they should attain. And finally, Old Testament as history provided a narrative of patience and keeping faith during periods of reversal of fortune and was peppered with memorization of Psalms and Proverbs. If Mrs. Dobson's syllabus was adopted by other teachers, the time she allotted per week is also important to consider, since the girls' school day was shorter meaning girls could receive a higher proportion of time in religious instruction as compared to boys, and Mr. Melles' time-table. Though it is difficult to assert from these examples, the appearance is that girls were given more religious instruction during the week, and since they had a shortened school day, this translated into a greater amount of time spent on religious subjects than would be typical for a boys' 27 hour schedule. This intimation follows with the general reasoning of

school heads at the time, that a girl's future would likely be taken up by home and family, and as a mother, her Christian faith and knowledge was necessary if her children were to be brought up correctly with the aim of preserving Democratic Christendom. By this reasoning, the moral future of the nation was in the hands of these working-class girls.

Given that religious instruction had a broader goal, and the question of the kind religious instruction offered in transferred church schools became national news, it stood to reason that LEAs would provide a more thorough syllabus. The LEAs sought not only to equip future mothers with a good Christian education, but also young men who were the traditional leaders in the home and community to demonstrate faith for both domestic and public spheres. The push for agreed syllabi of religious instruction did follow the pattern of depth in content that Mrs. Dobson's girls' syllabus did lay out, but for both sexes. The extent to which the recommendations of Melles and Dobson were followed equally in boys' and girls' schools, elementary and secondary, is hard to quantify since these were not statutory mandates from the Board of Education, and since secondary schools were exempt from the Cowper-Temple clause.

At the beginning, the movement of individual LEAs or counties drafting their own revised and Agreed syllabi, encountered currents of new scientific thought that influenced what curricular changes would be made to how religious instruction was taught. Advances in child brain development and psychology led the way in providing evidence that dogmatic, long-winded lessons on faith were not intelligible to young children, and often led them to avoid church as they got older because of their negative experiences or boredom.[43] The Reverend, Dr.

[43] Syllabus of Religious Instruction, West Riding Yorkshire, 5.; Church Assembly Report, 9. Papers of Parent Teacher Association, Trades Union Congress Collection, LC 368. MET.; See Erik Linstrum, *Ruling Minds: Psychology in the British Empire* (Cambridge, MA: Harvard University Press, 2016); Michal Shapira, *The War Inside: Psychoanalysis, Total War, and the Making of the Democratic Self in Postwar Britain* (Cambridge: Cambridge University Press, 2013) for a discussion of the rise of psychology in evaluating school children.

A.W. Harrison wrote in 1931 "a more detailed study of child psychology has led to a new grading of the schools, and in all the new syllabuses of religious instruction the definite breaks in school life recommended by the Hadow Reports govern the ground covered." He continued:

> These revisions were also overdue because of the changed attitude to the Bible. A generation has now passed since the Hastings "Dictionary of the Bible" appeared, representing a large body of agreement on Biblical studies that was markedly different from the conception that governed schemes in elementary schools. During the last thirty years that change of attitude has become the heritage of the great majority of thoughtful Christian men and women, but we have been slow to express it in our classroom schemes…Altogether, an astonishing improvement has been made, and no comparison is fitting between these admirable publications [agreed syllabuses] and the meagre outlines that were offered to teachers (and still are in many areas) a generation ago. It is not merely that a more historical and scientific study of the Bible is made possible; there is a much more religious aim in the lesson, and the value of Christianity in human experience dominates all.[44]

The Reverend Harrison, like many of his time, was keen to see life and spirit injected into religious instruction so that it was more than just an automatic, passive practice in school. One of the earliest agreed syllabi was written by the Hampshire County Council in 1923, stated "the aim has been to give instruction in the Christian faith as a living thing, with power over daily life."[45] For many observers, the key to bringing life into religious lessons was a competent, and enthusiastic teacher who could infuse his or her lessons with their own love of Christ. The *Cambridgeshire Syllabus of Religious Instruction* stated in its 1943 edition, that

> the religious atmosphere of the school and the religious development of the child must depend first and foremost on the teacher's personality and the ideals and faith behind it…The personal reverence, both outward and inward, of the teacher is of immeasurable importance. The wakening and guidance of the spiritual senses in the children is the first factor in creating the finest fruit in individual character and, consequently, in the

[44] Rev. Dr. A.W. Harrison, "The Ideal 'Agreed' Syllabus of Religious Instruction: The Search and its Progress—A Remarkable Movement of National Importance." Council of Christian Education of the Free Churches, 1931., 1, 3. Papers of the National Union of Women Teachers, UWT/D/28/36 Religious Education 2 of 3. Newsam.
[45] Hampshire County Council Syllabus of Religious Instruction (Winchester: Warren & Son Ltd., 1923), 3. Papers of the National Union of Women Teachers, UWT/D/28/19. Newsam.

> happiness and right development of the race. The responsibility of the teacher towards the spiritual growth of the child is no whit less than towards the intellectual and physical…[46]

It is important to note that in the 1920s, there was little opportunity for the majority of teachers to receive training in the pedagogy and content of Religious instruction, as only a few training colleges provided such a course. Luck or the personal piety of the teacher meant that even with the guidance of new syllabi, it was difficult to find a teacher to give such inspiring lessons to interest children.

The other way to aid in building a living Christian faith was in the changes made in the syllabi to align with the secular subject syllabi delineated by age or form. A common breakdown was infants (5-7), juniors (7-11), and seniors (11-14+). For infants, ages five to seven, and later from age three to seven, they needed simple stories about the baby Jesus and God the loving Father. In the Hampshire syllabus, for example, infants in the first year were taught stories about "the love of God manifested in our Lord Jesus Christ," and the "power to live the Christ life by seeing the love, courage, mercy and loving-kindness in the lives of the followers of Christ." In addition, teachers could opt for "stories about our unseen Father and our talking to and with Him." Finally, no infants' education was complete without being taught how to pray.[47]

The juniors' syllabus taught about the nation of Israel and the history of the Old Testament and a juxtaposition between life in the East and life and worship in England. Stories of Abraham, the law as given to Moses in the Ten Commandments, and the Babylonian exile were covered.[48] Then the curriculum shifted over to the New Testament and the Gospels with the birth of Christ. The aims of this course on Christ's life were to "teach why God became a

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[46] Spens, et al., *The Cambridgeshire Syllabus of Religious Teaching for Schools* 9.; Similar statements are found in the Middlesex Education Committee Syllabus of Religious Instruction from Public Elementary Schools (London: Harrison and Sons, Ltd., 1929), 4., Papers of the National Union for Women Teachers, UWT/D/28/19. Newsam.
[47] Hampshire County Council Syllabus of Religious Instruction, 10-12. UWT/D/28/19. Newsam.
[48] Ibid., 12-13.

man, to show that God is love; [that God came] to seek and to save; [and] to show us how to live."[49] Lessons addressed Christ's life from birth, boyhood, his ministry and teaching, healing, the opposition of Pharisees, his last days and crucifixion, and the Easter resurrection were taught in increasing degrees through each of the four years of the course. Then, coverage turned to The Acts, and the work of Paul's evangelism. In corporate worship, students were taught how to pray sincerely, how to behave, and how to revere church.[50]

Seniors, in a similar way, got more depth over their 3-4 year course of religious instruction of the life of Christ, his disciples, and the symbolism of the cross, as well as a series of lessons called, "The Bible and What it Is." This was where the influence of textual criticism entered the syllabus, whereby the Old Testament was taught as a series of literary works set in a particular cultural and historical context that informed the student on how the Old Testament provided a revelation that was fulfilled in the life of Christ. Practical questions for students to consider included why "God gave the Old Testament to Mankind," how "God's people were taught," His ways, and why the "Bible is considered the Word of God."[51] Senior students also learned about the key prophets in the Old Testament, what a Messianic prophecy was, and what Discipleship was and how they should follow Christ – for oneself, in relation to others, and in public life. In later years, seniors learned about the Book of Revelation as the completion of Christ's promise, as well as the Holy Spirit, and the books of the Old Testament that were divided into topics on the Prophets, the Wise Men, the Law, and the History of Israel. Then seniors were taught about the growth and spread of the early church, and discipleship with more teaching on social ethics. Once the Old Testament was covered, an in-depth study of the Gospels

[49] Ibid., 13.
[50] Ibid., 14-19.
[51] Ibid., 20-21.

followed, inclusive of the Synoptic Gospels and the source Q – *Quelle,* that taught that the history or the New Testament could be reconstructed from the dates the gospels were written. This information added to the emphasis of Paul's missionary work and building the early church. In the final year, seniors were taught how translation had altered the meaning of the Bible through time, and how the Early Church determined which texts were authoritative. And finally, they learned about the activities of the Early Church in England and the lives of English Saints.[52] A key component in this syllabus was the emphasis on "memory work" or learning verses by rote. Though the Council stressed that the "power to memorise is strong in childhood…there is a danger [that] memory knowledge be mistaken for intelligent comprehension."[53] Accordingly, the teacher assigned verses like prayers and hymns, and proverbs connected to the lesson. The Council provided a detailed list of suitable passages for students at every standard to learn, by heart. Children who could best master their recitations won awards. The hope being, that in adulthood, the students would remember the verses and instruct them in right living. The emphasis on memorization was considered a best practice and adopted in all the major agreed syllabi.[54]

What is significant in this example is the transition of religious instruction from a perfunctory aspect of the daily school schedule, where morning assembly began the day, and incidental teaching of Christian principles took place through the school week, to a system that treated Religious Instruction as seriously as any academic course, where the content influenced every other subject.[55] By teaching the newest methods Biblical Criticism, historical interpretation

[52] Ibid., 22-30.
[53] Ibid., 8-9.
[54] Manchester Education Committee, Scheme of Religious Instruction in the Municipal Public Elementary Schools (Manchester: Education Offices, 1925), 13.; Middlesex Education Committee Syllabus of Religious Instruction from Public Elementary Schools, 5.; Oldham Education Committee Suggested Syllabus of Religious Instruction (London: Macmillan and Co. Ltd., 1923), 2. Papers of the National Union of Women Teachers, UWT/D/28/19. Newsam.
[55] Oldham Education Committee Suggested Syllabus of Religious Instruction, 2.

of the significance of events in the Old Testament nuanced the mystery of the Bible and its unquestioned authority. The discussion of "Q" and the Synoptic Gospels helped to date the advance of ideas in the early church. This was an academic treatment of the text of the Bible. As such, it could not be disputed as simple belief or the recitation of mere prayers, but was instead a legitimating force in situating Religious instruction at the heart of school life.

The second key departure that enabled the success of the agreed syllabi was the shift in teaching about Jesus from an adult perspective, and instead, teaching about the life of Jesus, and God the Father from the life stage of the children. Here again, the use of developmental psychology aided authors in drafting the syllabi, in which they recognized that younger children related to stories of Jesus as a baby, or as a child in the Temple teaching the Rabbis, and of a loving Father God. The lessons gave older children more depth on the life and death of Christ and the Resurrection to reflect their capacity to understand sacrifice and redemption. Teens were taught how the histories in the Old Testament and the development of the Early Church influenced their understandings in how to live an ethical life in Christ's teachings beyond the school. All of these teachings were meant to prepare the student for an adult life where they would model what they were taught, and preserve the British nation, in their turn. Here effective teaching, and solid guidance in the syllabi brought faith to life and served to revitalize Christian values in what was feared to be a rapidly secularizing society.[56]

Though this summary of the Hampshire syllabus certainly includes far more detail and advanced study of the Bible, similar to Mrs. Dobson's Girls' School syllabus, it is one of the briefest syllabi written. At 30 pages, it provided more than enough material and suggestions to

[56] See Cox, *The English Churches in a Secular Society*, and Brown, *The Death of Christian Britain*.

occupy a teacher for an academic year. By the 1940s, these syllabi ran to 110 pages.[57] While there is no quantitative data to demonstrate whether quantity in these syllabi leant themselves to quality instruction for either boys and girls, it is clear that they did reinforce the view that girls should receive depth of instruction in order to have a solid foundation in Christian faith for their futures as homemakers and mothers as the keepers of piety and tradition.[58] Whereas older boys got more education in ethics, and theological debates than in years past to instruct their lives beyond the home.

An example of how senior girls were taught religious content was preserved from Bolton's Girls' School in the Mass Observation Archive. Mass Observation was a multiyear ethnographic study of the industrial town of Bolton, near Manchester and how people their lived and reacted to societal change.[59] A citizen observer procured and saved this lesson from April 1937 that asked girls to synthesize their learning and write a short composition on "What I think of Jesus." Thirty-eight girls' responses reveal what they had learned and retained from their Religious instruction course.[60]

Table 3: Frequency of Descriptors used in Girl's Essays on "What I Think of Jesus

Descriptive terms used for Jesus	**Number**
Healer/Miracles	26
Good man	22
Preacher	13
References to cross/crucifixion	13
References to Resurrection/Died for us	12
Loved Children	8
Clever/Intelligent/Smart	7
Honest	6
Kind	6

[57] The Cambridgeshire Syllabus, 1943, ran to 110 pages plus 50 more pages of appendices. It was the most comprehensive syllabus and the most widely adopted across England and Wales.
[58] Brown, *The Death of Christian Britain,* 58-87.
[59] See James Hinton, *The Mass Observers: A History, 1937-1949* (Oxford: Oxford University Press, 2013).; Clifford Geertz, *The Interpretation of Cultures* (New York: Basic Books, 1973), 3-30 on Thick Description.
[60] Bolton School Children Essays, "What I think of Jesus." Mass Observation Archive Worktown, Schools, SxMOA1/5/16/49/D/1. The Keep. Tallies counted by this author.

Pharisees/Jealousy/Enemies	6
Courageous/brave/strong	5
Obey god	4
Love	4
Plain person	4
Best example to men	3
Forgiving	2
Happy	2
Loved sinners/men	2
Not selfish	1
Innocent	1
Not quarrelsome	1
Self-control	1
Too righteous	1

For example, Freda Poole wrote:

> Jesus was a good and pleasant man. He was kind, generous and honest. Christ was very brave for when he was being crucified he did not fear for he knew his father God was with him, he was also respectable.
>
> He made plenty of poor people happy and helped them in different things, he was right in preaching of God who was his father, he was kind in these things. God knew he had found the right person to work miracles and preach for him. Christ was also very gentle for he loved the little children and he told them stories too.[61]

What makes these essays significant is that they reflect the aim of the agreed syllabi which was to make religious instruction a living thing for students, and that the methods employed to do this had been successful. This is evidenced in the relation of Christ the man to the children. That eight girls, including Freda Poole, wrote about God's love for children not only shows that teaching religion in a way children could understand worked, but for girls, it internalized the notion of love and dedicated service to children – their future children, which was the goal for girls' citizenship.[62] Over half (22) recognized that Jesus was a good man, and three wrote that he

[61] Freda Poole, "What I think of Jesus," Bolton School Children Essays, "What I think of Jesus." Mass Observation Archive Worktown, Schools, SxMOA1/5/16/49/D/1. The Keep. 1238

[62] Hadow, *Differentiation of the Curriculum for Boys and Girls Respectively in Secondary Schools*, 126: "We may assume that all children have to be educated with tow ends in view – (i) to earn their own living (ii) to be useful citizens; while girls have also to be prepared to be (iii) makers of homes." This information is discussed at length in the introduction and Chapter 2.

was the best kind of man, or best example to men which was a nod to the teaching of ethics, or how to live like Christ. The fact that they credited Christ as being obedient, kind, and loving reflected how girls should behave through their lives. Several girls tied Christ's courage to His time on the cross and the notion that He could have gotten himself off the cross, but He did not, despite His ability to perform miracles. Twelve connected this act of selflessness to the key tenet of Christian faith which is the recognition that Christ's death on the cross was for all people, to save them from their sins. Six understood that Christ was sent to the cross unfairly because of his enemies. And one further point was that for girls, Christ was depicted as a plain looking, unremarkable man, whose spirit and actions spoke for themselves. Among working-class girls this could be a direct form of ethical teaching in how to dress and conduct oneself in public. In a time when dance halls and going out with friends usually entailed a nice dress and makeup, the teachers might be countering this view by emphasizing that plainness was a kind of virtue, and that girls should follow that model that Jesus represented. This connects to teaching in sex education and hygiene which discussed the evils of tight clothes and drawing the wrong kind of male attention. This information will be discussed in greater depth in Chapter 4.

On the other hand, for boys, where religious instruction was given, it tended to be more academic than the senior girls who focused on the traits of Christ. In the 1930s, as more and more agreed syllabi were adopted among elementary schools, several were revised to include age ranges for secondary students, from 15-18 or 19 years of age. The West Riding and Cambridgeshire Syllabi set the tone for other syllabi. The West Riding Syllabus began teaching on Textual Criticism at age 12, where the Cambridgshire recommended it at age 15. The West Riding Syllabus focused on more advanced theological questions for 15-18 year-olds as opposed to learning how the Bible was composed and its history; these questions included God's

relationship to man, and man's relationship to God, the duality of body and soul and the need for self-discipline, God's purpose for man, sin, salvation, and forgiveness. The West Riding Syllabus then turned to Christian ethics in the modern world for which posed questions like: "is it wrong to swear," or "have impure sexual thoughts;" "why should I donate to charity," "what should Christians think about war, slums, or gambling." More intellectual issues relating to belief and faith concerned how to know that the Bible was true, what was the trinity, if God is good, why do bad things happen, and what is the purpose of missionaries?[63]

For 16-18 year-olds, the course for the West Riding Syllabus delved further into ethics, and also philosophy with connections to science and cosmology, including how to determine the facts of faith in connection to scientific proofs. The West Riding Education Committee stated that:

> It has been said that there is a truce between…science and religion. Certainly, there is little overt conflict…But it is a truce and not a peace. Each side has withdrawn its forces; in some cases the forces have been split up and even mingled with those of the opponents, as when apologists for religion use evidence given by the physicists in arguments with the biologists…[However], it is the purpose of this course to examine the contributions which religion and science make to thought and civilization, and to examine relations between them.[64]

To get at this relationship between the influence of science and observation, and religious faith, the authors proposed the following questions which would be based on what the boys' learned in their science courses:

- How the rise of scientific knowledge affected religion?
- The domain of science; the contribution of science to truth.
- Causation and determinism in science; developments in physical science.
- Developments in biology, psychology, and the social sciences.
    - Their relevance to religion.
- Miracles: can they occur?
- Prayer: can it achieve anything?[65]

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[63] Syllabus of Religious Instruction, County Council of the West Riding Yorkshire Education Department, 65-70.
[64] Ibid., 72-73.
[65] Ibid., 73.

Similarly, the Cambridgeshire Syllabus addressed science as a secular way to assert what world religions claimed, namely, that there was some power or force at work in the universe from which all life proceeded.[66]

> Science explains the development of nature and man without reference to God. It studies observed phenomena in their inner-relations, and aims at presenting them as an orderly system. If God could be discovered by scientific investigation, He would be a part of the world. He would therefore not be God, in the sense which religious people use the term, for the Object of worship is normally conceived as beyond the world of phenomena.[67]

However, the authors stressed that God was not bound by temporal confines and though science could provide much insight into the universe, it could not comprehend the Creator. The objective for the boy who received advanced science instruction, was to problematize what faith and the Bible told him was true and how science either interfered with or helped to clarify what truth was. The Cambridgeshire Syllabus was more firmly on the side of faith in God and God's word as an absolute that science failed to comprehend. The West Riding Syllabus offered a more humanist approach to how civilizations have encountered conflicts between science and religion and adopted the results into their own cosmologies. It attempted to make sense of the history of accommodations and revocations religion and science have made for one another, and how these ideas shaped modern conceptions of what was real and true. This curriculum was certainly a far more philosophically advanced religious education than the average working-class girl would receive even if she attended a secondary school. Again, the divisions in gender might not be apparent on the pages of the syllabi themselves, but they are explicit in the choices that instructors made on what to teach to boys versus girls, and at what age suggested content was suitable for either sex.

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[66] Spens, et al., *The Cambridgeshire Syllabus of Religious Teaching for Schools*, 95.
[67] Ibid.

Impact of Agreed Syllabi

It is fair to say that the emergence and multiplication of agreed syllabi on religious instruction was the most successful reform of curricula in elementary schools in the 1930s. It had broad appeal to church leaders, educationalists, and teachers, clearly influencing the sort of education most children received in Britain. In 1937, the Council of Christian Education summarized the spread of Agreed Syllabi across 317 LEAs in England and Wales. The data are presented in the table below: [68]

Table 4: Adoption of Agreed Syllabi for Religious Instruction

Year	# of Agreed Syllabi	# of Independent Syllabi	# of Inadequate or unrevised syllabi
May 1930	120	30	167
June 1931	167	--	--
April 1932	181	--	--
March 1933	204	--	--
March 1937	264	20	30-40

While the information here is a summary, it does show the expansion of the adoption of Agreed Syllabi across the county by 1937. The Council stated that the 1937 tally of 264 LEAs using agreed syllabi represented 83% of all LEAs which taught 87% of English and Welsh children, and that the 30-40 LEAs providing inadequate religious teaching represented only 6-7% of the population of school children (approximately 4 million total in 1937 or 280,000).[69] By their own estimation, the spread of sound Christian teaching was virtually complete, and marked a major victory not only for education, but also for the preservation of Christianity in Britain. The Agreed Syllabi marked a period of unification in British Education which was unparalleled for any other curricular change apart from the spread of domestic subjects' instruction to be

[68] Council of Christian Education, "Religious Instruction in Public Education: A Statement and Report on Eight Year's Progress," 1937. Papers of the Assistant Masters' Association, AMA/E/2/1 Newsam.
[69] Ibid., 5.

discussed in Chapter 3. The Council stated that of the forty or so agreed syllabi, the Cambridgeshire was most popular, used in 105 LEAs, and West Riding and Hampshire were next with 22 LEAs each.[70] These data reflect not only a unity of purpose in providing religious education of like caliber, but a centralization of religious teaching based on a handful of agreed syllabi which took advantage of unequal resources across Britain where pressure and resources might be greater to affect change, so that small, rural districts could then adopt what larger councils had provided. Along with this expansion of syllabi was pressure to influence training colleges to begin to offer teacher's courses in religious instruction, based on the success and popularity of the agreed syllabi, in 1934.[71] From that point, more and more teachers had the opportunity to train to teach this subject specifically. It seemed true for many stakeholders that, in a period which witnessed the rise of fascism and attacks on established religion in Europe. "Christian teaching and way of life [were] the best foundation for personal character and national stability."[72]

In fact, the popularity of religious instruction courses continued to grow during WWII despite the dislocation of evacuated school children, precisely because of the threat of secularist Fascism as the Battle of Britain raged in late 1940. Educator Michael Duane, a decorated war veteran, reflected on the complete takeover of religious instruction following the Butler Act of 1944 which made religious compulsory for elementary and secondary schools. He credited the climate of the war as the impetus for such sweeping change.

> …There were…reasons for the acceptance of the religious clauses: first, that the experience of totalitarian war and the revelation that millions of Jews had been

[70] Ibid., 5.
[71] Ibid., 4.
[72] Ibid., 3-4.

> slaughtered shocked us into a realisation that seventy years of public education had not eliminated barbarity in people.[73]

Though Duane was critical of making religious instruction compulsory as it reminded him of the workings of undemocratic governments that the Christian State of Britain claimed it was not, the impact of the war led directly to the growth and expansion of the apparatus of religious instruction.

In 1941, the state of the faith of ordinary Britons was such a preoccupation for church leadership that the Archbishops of Canterbury, York, and Wales issued an Appeal for True Christian Education, which came to be known as the "Five Points." *The Times* reprinted the appeal on February 13, 1941 conveying the Archbishops' view that:

> There is an ever-deepening conviction that in this present struggle we are fighting to preserve those elements of human civilization and in our own national tradition which owe their origin to Christian faith. Yet we find on every side profound ignorance of the Christian faith itself. There is evidently an urgent need to strengthen our foundations by securing that effective Christian education should be given in all schools to the children, the future citizens of our country. The need is indeed so great and urgent that former denominational or professional suspicions and misunderstandings must be laid aside…[to] care for the place of Christianity in our common life.[74]

The Archbishops' further proposed that 1) Christian education should be given to all students in every school; 2) The status of religious knowledge courses should be elevated in teacher training colleges to a certificated subject; 3) Where there was only one or two qualified teachers to give religious instruction, that the time table allow them to teach the course multiple times through the day; 4) Religious instruction should be a subject inspected by the H.M. Inspectors; 5) All schools should arrange a time for morning assembly to start each school day. Further, they supported the

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[73] Michael Duane, "Religious Instruction and Moral Education," n.d., Papers of Michael Duane, MD/7/8/24. Newsam.

[74] "True Christian Education: Archbishops' Appeal, Effective Training for Citizenship," *The Times*, February 13, 1941. The Times Digital Archive, http://tinyurl.gale.com/tinyurl/CBzxE6. Accessed 10 Nov. 2019.

efforts to adopt agreed syllabi and welcomed the spirit in which these documents had been drafted and called for all Britons to "rally to this great cause" for the children.[75]

The Archbishop's appeals went far enough to effect reforms in the Butler Act of 1944, allowing teachers to earn certificates in religious instruction and providing for compulsory religious instruction across all schools. Despite the criticisms of educators like Duane who felt that compulsion was similar to ideological oppression, religious instruction was popular, and deemed important by average people following WWII. Mass Observation conducted a survey on religious secularization in Britain in response to the rise of fascism and the war. In this survey, dating from 1947, various aspects of personal belief were categorized to give a cross-section of belief across age, gender, and level of education. One topic that respondents were asked about was whether or not it was good that students should be given religious instruction in schools, and the majority of respondents, regardless of personal faith, agreed it was right that children were taught about Christianity. For example, a woman, aged 30 who had an elementary education stated that "Quite frankly, I think that perhaps they should [be taught Christianity] because it gives children an idea of what's right and wrong."[76] A man, aged 50, also with an elementary education said that "Children should be brought up on some foundation. You can't have them swearing all over the house and all that. You must have some means of control."[77]

These responses are important because they reflected that even if someone was not religious, they saw the value of children learning religious content at school as a means to establish an ethical baseline that citizenship required of them. Further, these responses undermined the extent to which secularization was supposed to have encroached on British

[75] Ibid.
[76] Mass Observation, *Puzzled People*, 87.
[77] Ibid.

society in the late 1940s. Though Jeffery Cox sees the 1930s as the end of the line for the usefulness of church in British society, Callum Brown states that there was a resurgence of faith in Britain in the 1950s, and the popularity of religious instruction courses and the will of the masses to support them confirms Brown's data.[78] Perhaps most significantly for this research, is the comment of the man, who saw religion or ethics as a means of control or discipline of children. This impact is borne out in the following chapters especially as the differentiation of the curriculum for girls becomes more pronounced as science, domestic subjects, and sex education are discussed. This research will highlight the tensions between science as a subject and as it influenced pedagogy which increasingly relied on observation, experiment and empiricism, and religion as a subject and theme which permeated secular instruction in science, domestic subjects, and sex education. Together, science and religion worked toward the same end in working-class girls' education in Britain: the promotion of motherhood as citizenship.[79]

[78] Cox, *The English Churches in Secular Society*.; Brown, *The Death of Christian Britain*.
[79] See Stephen Heathorn, *For Home, Country, and Race: Constructing Englishness in the Elementary School, 1880 – 1914* (Toronto: University of Toronto Press, 2000) for a discussion of citizenship in British Schools.

Chapter 3 Gender Differentiation and Science Curricula

Introduction

In British state-aided elementary education, gender differentiation of the syllabi mirrored the physical environment of many schools. Kathleen Betterton recalled that in her school in London, "the infants' class was co-educational, though after [she] passed into the upper school (10+), the sexes were segregated to different floors and different playgrounds so that inside school we never met."[1] The severe division was felt in other ways with overcrowded classrooms and uninspiring lessons, but Betterton blamed poverty for that. She felt that the "greatest obstacle her teachers faced was the narrowness of our background." Betterton understood that growing up working-class often meant limited exposure to books, or even newspapers, apart from the "football results." She recalled that "in the drabness of our environment there was nothing to awaken any latent sense of beauty; the school itself merely reinforced the outside."[2] Betterton's experience reveals that class division and gender division followed from the practicalities of the adult world rationalized onto that of children who would one day be adults in that same system. It is doubtful that impressions of the young informed the design and division of elementary schools and their curricula. Instead, maximum benefit for the rate payer's shillings determined what effort would be invested into boys' and girls' curricula and to what end each would be educated, one for the world of work, and one for the home.

Historical Background

In the beginning of state-aided education with the passage of the Forster Act of 1870, education was far more limited for working-class children than it was for Betterton who was able

[1] Kathleen Betterton, "White Pinnies, Black Aprons," 2-71a, John Burnett Archive of Working-Class Autobiography, Brunel University, 17. (Hereafter, Burnett).
[2] Ibid., 33.

to receive a secondary education. At this time children between five and 13 (but more often only to ten) were only meant to be educated in the 3Rs, reading, writing, and arithmetic. That was enough education to make them literate in order to make them capable workers and citizens. In 1867, the franchise had been expanded to working-class men for the first time, and the state intended that these men's sons should be educated enough to know their place in society. The Forster Act was the culmination of that social anxiety over what the masses might do with the franchise if left illiterate.

Early state schools adopted the monitorial system of Bell and Lancaster, as mentioned in Chapter 2, where older children helped teach the 3Rs by rote and drill – drab regimentation as Betterton recalled.[3] In the first decade of state education, this meagre provision was offered to both boys and girls, but girls had the added course of needlework, while boys often took woodwork. During this interval, the Revised Code of 1862 was adopted. It set a low bar for measuring student achievement. For example, it measured the progression of reading ability from monosyllables, to simple sentences in recitation to the ability to repeat simple rhymes or poetry and the ability to read a passage from a newspaper by standard IV at school leaving age of 11.[4] (See Appendix) Though basic, this education fitted working-class children with enough knowledge to make them literate and numerate, and would also supply them with the tenets of Christian faith via Cowper-Temple to enable them to live moral and obedient lives as laborers.

Between 1870 and 1896, the standard of the average state-aided school rose along with school leaving age, and a gradual transition away from parents relying on the income of children of 10 to maintain the meagre condition of the working family. These advancements were made

[3] Ibid., 32.
[4] Derek Gillard, "The Revised Code," in *Education in England: a Brief History*, 340, 341. http://www.educationengland.org.uk/documents/cce/revised-code.html.

possible by the 1880 Education Act which made elementary education mandatory for all children to age 10 or the successful mastery of the sixth standard – whichever came first – and made more stringent the exemptions for part-time or full-time work of children younger than eleven. In 1882, under the Mundella Code, the curriculum was made more flexible by the inclusion of more subjects such as science and cookery for girls' schools which could be taught by meeting conditions to receive further grants by the local education Boards.[5] The Science and Art Department of the national Board of Education also disbursed grants to elementary and secondary schools that sought to expand the subjects taught in schools across the country. Two further developments helped smooth the way for elementary education were the elimination of fees to attend state-aided elementary schools through the Education Act of 1891, and the raising of school leaving age from 11 to 12 years in 1899. In connection with the advent of scholarship examinations for children of 11 years, to determine if they should continue on to a secondary education in the 1890s, economic and social conditions had changed which kept children out of factory work for longer and did not make the loss of a child's income detrimental to a family's ability to keep their home. In turn, more children received a better-quality education, aided by improved teaching which had moved away from the monitorial system of teaching by rote.

Gradually, the education of working-class children began to assume a parity with the curriculum of middle-class and elite institutions, especially where boys were concerned. By 1902, it was not uncommon for working-class boys to be taught history, English literature, algebra, geometry, trigonometry, botany, and elementary chemistry and physics, and to sit exams for promotion into secondary schools. The expansion of the curriculum was organized through the Balfour Act that allowed local rates to fund secondary schools in exchange for offering a

[5] Gillard, "The Mundella Code 1881," in *Education in England: a Brief History.* http://www.educationengland.org.uk/history/chapter06.html#02.

percentage of places by scholarship. Since the state offered scholarships to the most capable working-class students, the quality of elementary curricula rose to meet the standard of the 11 plus exam. This expansion transferred to working-class girls as well. They were taught history, botany, English literature, arithmetic, laundry and cookery in connection to aspects of physics and chemistry, and needlework. They were also eligible to sit exams for entry into grammar schools at 11+ but for many, the additional cost of fees and uniforms for secondary education was too high for their parents to justify.[6] While 1902 appeared to signal the democratization of secondary education for all children in England, prevailing gender biases and economic concerns of working-class families conspired to limit the number of girls who did receive a secondary education between 1902 and 1944. The information in Table 5 reflects the bifurcation of the British education system both by class and by gender.

Table 5: Stratification - Class and Gender Divisions in British Education

<table>
<tr><td colspan="4">Working-Class</td><td></td><td colspan="4">Middle-Class</td></tr>
<tr><td colspan="4">Boys have more opportunity to go to Grammar School</td><td></td><td colspan="2">Boys</td><td colspan="2">Girls</td></tr>
<tr><td colspan="4">Girls usually follow the greyed paths</td><td></td><td colspan="2"></td><td colspan="2">University 22-24</td></tr>
<tr><td>Non-Selective Central School Quasi-Secondary (13-14)</td><td>Technical College or Continuation School (14-21)</td><td>Teacher Training College (18-21)</td><td>University (18-21)</td><td></td><td>Civil Service Exams</td><td>University (18-21)</td><td>Teacher Training College (18-21)</td><td>Domestic Instruction Center (18-21)</td></tr>
<tr><td>Senior Elementary School (11-14, school leaving age 14)</td><td>Selective Central School (11-16) Secondary Free tuition</td><td colspan="2">Grammar School (11-16 or 18) Secondary By Scholarship but not maintenance grants for fees</td><td></td><td colspan="2">Public Grammar School Fee Paying (11 or 13 – 18)</td><td colspan="2">Ladies’ College Fee Paying (11 or 13 – 18)</td></tr>
<tr><td colspan="4">11 plus Scholarship Exam</td><td></td><td colspan="4">Preparatory School (9-13) Fee Paying</td></tr>
<tr><td colspan="4">Junior Elementary School (7-11)</td><td></td><td colspan="4" rowspan="2">Home Instruction with tutor or governess (5-9 or 11-13)</td></tr>
<tr><td colspan="4">Infants Elementary School (5-6)</td><td></td></tr>
</table>

[6] Lottie Barker, “My Life as I Remember It,” 33-34. 2-37. Burnett.

The table reflects the divisions of education into the elementary route on the left which has been described above, and in Chapter 2, whereas middle-class children pursued private education at fee-charging institutions and did not mix with their social inferiors. Working-class girls could expect eight to nine years of elementary education, while middle-class girls could at least obtain a grammar school or secondary education that might prepare them for teaching careers. Class divisions coupled with gender bias doubly disadvantaged working-class girls.

To Educate a Girl?

However, despite advances in educational opportunity, the gendered bias of parents against educating girls to an excessive degree was still prevalent. Even among elite and noble families, their daughters' education was meant to give them appearance of "gentility, where only the Bible and devotional literature were read."[7] Mr. Hadow summarized the view that "there was a general indifference on the part of parents to the mental cultivation of their daughters and serious learning was widely regarded as a positive defect in women."[8] It is clear that education for a girl was not meant to be academic but one which developed her manners and directed her toward home duties and the cultivation of talents that would please and complement her husband. For educationalists like Miss Beale and F.D. Maurice, they each supported the view that the goal of a girl's education was to prepare her for her "natural vocation in the world, as mothers of families, as social workers, as the companions of men, and as teachers."[9] Service, childrearing, subordination to men, and informal teaching were the main roles a woman could rightly take on in the home. In consequence of the fact that most women did become mothers,

[7] William Henry Hadow, *Board of Education Report to the Consultative Committee on Differentiation of the Curriculum for Boys and Girls Respectively in Secondary Schools* (London. H.M. Stationery Office, 1923), 21.
[8] Ibid., 23.
[9] Ibid.. 30.

the curriculum for girls' schools was heavily shaped by the domesticity which a woman's life should demonstrate. By the 1920's, girls' curricula were "implicitly" guided by the fact that a general education needed to be supplemented by "adequate training designed to fit girls for their duties of home life and motherhood."[10]

Following WWII, John Newsom argued in *The Education of Girls,* that at least 85% of young women would marry and become mothers, and that "almost every woman enters marriage deliberately of her own free will," and would readily "give up overnight their careers and the comforts of [single] life if they ever got the chance."[11] Newsom contended that "while we talk glibly of 'equality of opportunity' no amount of equal education and minimum wage levels will, of themselves, produce the qualities to make good mothers, and without good mothers, it is difficult to rear good children."[12] To that end, he did not see the point in providing women with advanced education "since their period of employment will be temporary, and [their] economic security will be provided by the future husband." For Newsom, even in 1948, it was still not worth the time and money to provide a girl with prolonged professional training equal to a boy.[13] The better route was to provide more domestic training to girls rather than less, and to make girls' education far less academic in character and more practical or hands-on in training for their domestic duties.

In addition to venerating the role of motherhood in British society, working-class men in industrial jobs had long argued that women belonged in the home, but for a different reason. Samuel Smith was a working-class trade unionist who was born near Manchester in the 1870s. He held the traditional view of women that Newsom had some 60 years later. In his

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[10] Ibid., 47.
[11] John Newsom, *The Education of Girls,* (London: Faber and Faber Ltd., 1948), 26
[12] Ibid.., 28.
[13] Ibid., 31

autobiography, "Bosley Cloud, A North Country Childhood," he reflected on his mother stating that she was the greatest moral influence [on him]. Until she married, …she had been a regular attendant at an Adult Sunday School. I respected and adored her… Her influence was quiet and persisting.[14] Samuel Smith gave his mother great credit for her love and her influence in his life as a homemaker and family leader. But Mr. Smith did not believe that a woman should compete with men in work. In recounting a strike at his father's dyehouse in Macclesfield, Smith wrote:

> all [the dyehouses] were tiny places. The largest employed at most some sixty men, and it was at the largest that my father worked. No machinery was used. The skeins of silk were moved through the liquor in the vats by hand. In earlier years, before [dad] was married, he had worked at other jobs in factories where women were also employed, but for some reason, probably wage-undercutting by women, he had sworn he would never work side by side with women again.[15]

For working men, laissez-faire capitalism had been their worst enemy. As technology advanced, factory and shop owners looked for ways to cut labor costs. This was accomplished by employing unmarried women and children who could perform unskilled or semi-skilled tasks and would accept a fraction of the pay of a man.[16] On the one hand, it made the factories and mills more profitable, but on the other, it necessitated that working families had to have children in work at an early age in order to afford lodgings, food, and clothing. Ironically, it was all-male trade unions, who closed shop to women, from the 1880s that agitated for and got many of the labor reforms via strike action and the vote that improved the status of men's wages. In turn, this allowed their children to be at school longer and to be better educated, and also enabled working men to support their families without their wives having to work in factory conditions, or to work from home in sweated trades.

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[14] Samuel Smith, "Bosley Cloud, A North Country Childhood." 3-168. Burnett (2159), 15.
[15] Ibid., 22.
[16] Gareth Stedman Jones, *Outcast London: A Study in the Relationship between Classes in Victorian Society* (Oxford: Oxford University Press, 1971).

Unfortunately, Smith's attitudes and hostilities were dominant in dictating if working-class girls could obtain a secondary education if their family was financially secure, or if economic circumstances and gender bias determined that a girl's use was to her mother and in working to help support the parental household until she married. Sadly, even though girls could sit exams at 11+ to win scholarships to attend secondary grammar schools, as is detailed in Chapter 6, more often than not, a girl was not permitted to accept the scholarship for a number of reasons. This could be because she was needed in the home to help her mother with household chores and younger siblings; her parents could not afford transportation, books, or uniform fees which were not covered by the scholarship; or her parents would not consent to spending more time and effort educating a girl than her brothers who needed the opportunity to find careers beyond the factory floor.[17]

The gendered bias against educating girls for professions in Britain persisted beyond WWII, I argue, because of a societal attempt to maintain the status quo in a half century of unprecedented change and social upheaval which saw the destruction of two world wars, the deaths of two generations of young men, and the Depression that led to mass unemployment for adult men.[18] The loss of empire paired with the crisis of masculinity and patriarchy at home combined to reinforce the ideal that a girl would grow up to assume to role of wife and mother, and that the education she most needed was a moral one and one that taught her how to run her

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[17] Lottie Barker, "My Life as I Remember It," 2-37. Burnett. 7, 33-34.; May A. M. Rainer, "Emma's Daughter," 2-644. Burnett, 39.; Alice Collis, "My First Strike," 3-230. Burnett, 1781.; Annie Elizabeth Passiful, "Autobiographical Letter," 3-132. Burnett, 1996.; Mrs. D.M. Ponton, "Autobiographical Letter," 2-629. Burnett, 2009.; Eva Shilton, "School and Family Life in Coventry 1913-1921," 2-706. Burnett, 2210-2212.

[18] Molly Keen, "Childhood Memories – 1903-1921," 2-449. Burnett, 1943-1944, discusses the loss and disfigurement of men and after WWI and their mass unemployment afterwards.
See Also, T.G. Ashplant, *Fractured Loyalties: Masculinity, Class, and Politics in Britain, 1900-1930* (London: Rivers Oram Press, 2007).; Jessica Meyer, *Men of War: Masculinity and the First World War in Britain* (Houndsmills, UK: Palgrave Macmillan, 2009).; Heather Salter-Streets, *Martial Races: The Military, Race, and Masculinity in British Imperial Culture, 1857-1914* (Manchester: Manchester University Press, 2004).

home efficiently. Through 1939, in spite of having earned the vote by 1930, married women were barred from teaching or working in any former premarital profession except due to the conditions that war imposed which demanded that women step into jobs vacated by young men. In both WWI and WWII, women went into factories and built munitions, aircraft, and tanks for the war effort. But following the war, it was expected that women would give up their jobs, and their independence and seek marriage or more traditional, home-centered work once men returned.[19] Those men who did return from the trenches of Belgium and France were often grossly disfigured, blind, or missing one or more limbs, or crippled with shell shock. Britons felt that the Great War depleted the virility of a generation of young only to be repeated on approximately the same scale in WWII.[20] For psychological and social reasons, British society needed normalcy, and the nuclear family and the ideal of the housewife who did not have to work outside of the home provided that constancy in the face of such rapid social change.

However, lived conditions in the 1920s during the General Strike of 1926, through the 1930s with the advent of unemployment insurance or "the dole" meant that working class families were more unsettled and less secure economically than they had been since the 1880s.[21] Masses of fathers and sons spent their days seeking employment for a year or more on end. It was necessary that wives work to supplement family income. Children would need to contribute their wages to the household, on leaving school at 14. Furthermore, many households were

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[19] Deirdre Beddoe, *Women Between the Wars, 1918-1939, Back Home to Duty*, (London: Pandora, 1989).; Gail Braybon, Woman Workers in the First World War: The British Experience (London: Croom Helm Ltd., 1981).; Claire A. Culleton, *Working-Class Culture, Women, and Britain, 1914-1921* (New York: St. Martin's Press, 2000.).; Elizabeth Roberts, *A Woman's Work 1840-1940* (Houndmills, UK: Macmillan Education Ltd., 1988).; Selina Todd, *Young Women, Work, and Family in England 1918-1950* (Oxford: Oxford University Press, 2005).

[20] Paul Deslandes, Research talk, March 2011 at Texas Tech University into masculinity as impacted by war wounds and cosmetic surgery or masks.

[21] Ross McKibbin, Ideologies of Class: Social Relations in Britain 1880-1950 (Oxford: Oxford University Press, 1990).; Stedman Jones, *Outcast London.*

headed by widows whose husbands had died in the Great War, or due to work accident.[22] These women would have to be able to earn money. It is unlikely that the education these women had received in the early 1900s would have equipped them for wage earning despite the fact that they had married and had run a house. Economic circumstances drove the need for work that so many male reformers felt was unwomanly or undignified. Women who defied convention and sought further education were vilified for abandoning their traditional role, despite the fact that the notion of a stable nuclear family in the working-class community sustained solely by the wage of the husband was more myth than reality.[23] It was certain that working-class men aspired to be the lone breadwinner and assume the mantle of middle-class respectability for their wives and children, but the realities of capitalism, and the deskilling of jobs with the introduction of more advanced machines left men out of work as trades disappeared.[24] In this regard, the education of girls between 1902 and 1944 only envisioned the ideal life for the girl – that she would be educated to run her own home and raise healthy and respectable children. In consequence, her working life in a shop or factory or in domestic service would be brief.[25] Educationalists of the day felt that a girl did not need an overly academic timetable at school, and that the most important time should be spent on religious instruction and domestic subjects to suit her for her traditional, if not her idealized social role as reproducer of the social order.[26] In sum, the futures

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[22] Francis Hayter, Letter to Lesley Longley, n.d. Papers of Lesley Longley, LL/1/1, 1008-1014. University College London, Institute of Education, Newsam Library and Archives. (Hereafter, Newsam).
[23] Sara Horell, "The Origins and Expansion of the Male Breadwinner Family: The Case of Nineteenth-Century Britain," *International Review of Social History* 42 (August 1997).
[24] Anna Clark, *The Struggle for the Breeches: Gender and the Making of the British Working Class* (Berkeley: University of California Press, 1995).; Lisa Forman Cody. *Birthing the Nation: Sex, Science, and the Conceptions of Eighteenth-Century Britons*, (Oxford: Oxford University Press, 2005).; Mary Poovey, *Uneven Developments: The Ideological Work of Gender in Mid-Victorian England*, (Chicago: The University of Chicago Press, 1988).; Ellen Ross, *Love and Toil: Motherhood in Outcast London 1870-1918* (Oxford: Oxford University Press, 1993).
[25] Meg Gomersall, *Working-class Girls in Nineteenth-century England: Life, Work and Schooling* (Houndmills, UK: Macmillan Press Ltd., 1997).; John Newsom, *The Education of Girls*, (London: Faber and Faber Ltd.).
[26] Leonore Davidoff and Catherine Hall, *Family Fortunes: Men and Women of the English Middle Class, 1780-1850* (Chicago: The University of Chicago Press, 1987).; Paul Thompson, *The Edwardians: The Remaking of British society*, 2nd ed., (London: Routledge, 1992).

of half a century of young women were sacrificed to the State in service of the myth of the proper role of women as wives and mothers in Great Britain. It was the system of free elementary education which made this possible as only a fraction of working-class girls ever received a secondary education prior to 1945.[27]

Ironically, the best way to trace the impact of educating girls to be the moral center of the home as Samuel Smith's mother had been, is to analyze the science curricula between 1902 and 1944 and to note departures in the content of what boys were taught in comparison to girls. A further caveat is that though most working-class children did not receive a secondary education due to the economic pressures or long held biases, in examining secondary science curricula, the difference between girls' and boys' education is more apparent. The connection between science education and moral and religious instruction in British state-aided schools is most apparent in the girls' science curriculum as discussed in Chapter 2. The critical observation of this research is that far from being separate entities, opposed to one another, science and religion were used by educationalists to support the goal of the State to produce dutiful young women who would marry and raise their children to the same social standard—to the status quo.

To begin, the developments in the boys' science curriculum at the primary and secondary level will be analyzed, and then compared to girls' curricula in science in order to demonstrate the moral and domestic bent of girls' science education in the general education curriculum. As such, a key difference in British state-aided education was that in the majority of cases, girls and boys were educated separately, and this was built into the architecture of schools where there were separate entrances and playgrounds, then meal times and recess to totally segregate

[27] Roderic Donald Matthews, *Post-Primary Education in England: A Study of the Relation of the Board of Education to the Provision for Post-Primary Education in England, 1902-1929,* Diss. (Philadelphia: University of Pennsylvania Press, 1932).

children, as Betterton stated.[28] It was less common to have boys and girls taught together by the same teachers. Male teachers usually staffed boys' schools while girls' schools were staffed by women, sometimes by a female headmistress, but often by a male headmaster. Given that the curriculum for girls and boys was different after age 11, the attainments of female teachers were usually far less academically stringent than for male teachers, many of whom had university educations by the 1920s.[29] Women teachers may have been uncertificated, or had only a training college education which was two to three years training in teaching but was not academically rigorous as for male teachers' university training.[30] Educationalists during this period critiqued girls who attended secondary schools, stating that girls could not do higher level work in math and science because it was too taxing or because they had inadequate teaching.[31] Whether that criticism was fair considering the biases in place preventing the education of girls to the same standard as boys is the crux of the problem.

Boys' Science Curricula

By 1900, it was common for working-class boys to receive an elementary education that introduced science courses in nature study, botany, and gardening, basic chemistry and physics, as well as mathematics courses beyond arithmetic including algebra and basic geometry. This curriculum was a departure from the tradition of Public grammar schools which only reluctantly

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[28] Papers of Lesley Longley, LL/5, Newspaper Excerpt, by Michael McIlroy, "The Hidden History of Your School," *The Guardian Education Supplement*, Oct. 15, 1991, 10-11. Newsam.; Anonymous, Bolton School Observation, 13 July 1937, mss. Mass Observation. Mass Observation Archive, SxMOA1/5/16/49/H/6, 1. (Hereafter, The Keep); Tom Hulme, "'A Nation Depends on Its Children': School Buildings and Citizenship in England and Wales, 1900-1939," Journal of British Studies 54 (April 2015): 406-432.

[29] J.J. Thomson, *Science Education in Great Britain: from 'Report of the Committee appointed by the Prime Minister to Inquire into the Position of Natural Science in the Educational System of Great Britain*. (London: H.M. Stationery Office, 1918).

[30] Nora Hampton, "Memories of the Baptist End, Netherington, Dudley in the Period 1895-1918," 3-68. Burnett.; Mary Hollinrake, "Lancashire Lass," 2-413. Burnett.

[31] Thomson, *Science Education in Great Britain:* 16.; Hadow, *Differentiation of the Curriculum for Boys and Girls* 58.

added science to the classical and mathematics based curriculum.[32] W.C. Fletcher addressed the National Association for the Advancement of Science in 1903, stating that in boys' schools, the lower forms prior to the 11+ exam should follow the same general curriculum where boys would receive adequate training via manual instruction in woodwork, clay, or metal; simple observational science like botany, and would receive a grounding in reading, writing, arithmetic, English literature. In secondary school or upper forms V-VII, boys should be introduced to natural science via chemistry and physics, take algebra, geometry, trigonometry, and one modern language and Latin for those with the aptitude for languages.[33] History, drawing, and singing were also considered important subjects of lower form boys.[34] T.E. Page wrote that

> lately, however, science, long treated in schools as a sort of Cinderella, …Primarily, most of the sciences rest on the basis of an enormous accumulation of observed facts, and it is *after* [sic] the facts accumulated that reason, intelligence, and imagination begin to find in them a field for exercise. What is to be deprecated is that the teaching of science should assume too large a place in education, owing to a vague opinion that, because science is of the highest practical value, it therefore affords the best training for practical life.[35]

But it may have already been too late to stem the advance of science as it reflected the leaps in technological advance, particularly in boys' state aided elementary and secondary schools and technical training colleges. The President of the Educational Science section provided statistics for the number of Science schools founded in the late Victorian era and the number and amount

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[32] Michael E. Sadler, "On Curricula," *Transactions,* British Association for the Advancement of Science, 1903, 876 875. T.E. Page, "The Position of Science," *Transactions*, British Association for the Advancement of Science, 1903, 879, 880.
[33] W.C. Fletcher, "The General Curriculum," *Transactions,* British Association for the Advancement of Science, 1903, 887.
[34] G.F. Daniel, "On School Curricula with Special Reference to Commercial Education." *Transactions*, National Association for the Advancement of Science, 1903, 881.
[35] T.E. Page, "The Position of Science," *Transactions*, British Association for the Advancement of Science, 1903, 880.

of science grants awarded by the Science and Art Department during his address. Table 6 includes those findings.[36]

Table 6: Number of Schools of Science and their Grants

Year	Higher Grade Schools	Endowed Secondary Schools	Technical Institutes	Total Schools	Total Grants £
1895	53	30	29	112	39,163
1898	69	50	49	168	98,849
1901	63	106	43	212	118,833
1903	50	119	57	226	Not yet known [sic]

The data in Table 6 reflect that in the seven years previous, the total number of schools in receipt of grants for science courses had increased by 114, itself doubling the number of schools in existence between 1865 and 1895. The grants received increased by approximately 40-£50,000 between 1895 and 1898, and had increased still by 1903. While higher grade schools lost some grants, this was because the Balfour Act of 1902 allowed them to merge with secondary schools or incorporate themselves as state-aided secondary schools, so while not represented, their numbers did increase as more secondary schools applied for maintenance grants from the Education Department. Across the board, there was sufficient demand by parents and industry to support an exponential expansion of science education among boys' schools. Data from Table 7 confirm this trend.[37]

Table 7: Number of Laboratories Recognized

Year	Chemistry	Metallurgy	Physics	Biology	Mechanics
1880	133	--	--	--	--
1900	669	37	219	17	4
1901	722	37	291	26	10
1903	758	39	320	34	14

Sir William de Abney, President of the Section, "Educational Science," Address to Section L., *Transactions*, British Association for the Advancement of Science, 1903, 875.

[37] Ibid., 875.

The number of laboratories noted in Table 7 is significant for two reasons, the first being a straightforward account of the popularity of and provision for the various branches of natural and practical science which were taught; the second is that the data reflects individual communities and schools' commitment to building modern scientific laboratories which would allow boys to conduct experiments to learn the principles they were taught. The provision of state-aided elementary schools spurred a building boom in communities to provide space for their children to learn. As time passed and demand for science courses spread to elementary boys' schools, so too did the need for proper laboratory space, lab equipment, and books to fit out individual school labs. The investment in such facilities is marked, especially by the dramatic increase in chemistry labs between 1880 and 1900. Of more modest growth was physics, but it would be a mainstay of the curriculum in the twentieth century. Mechanics was an offshoot of physics and would likely have been tailored to training in engineering. Metallurgy represented a highly specialized and technical subject that would primarily have been taught at technical institutes, especially after 1902. Biology had a modest showing, but it is evident that the bias at this time, and through 1944 was in favor of experimental physical sciences, not observational disciplines like biology or geology – elements of naturalism that had driven scientific advance in the first half of the nineteenth century.[38] Industrial needs seemed to play a heavy role in which subjects were in demand and which industries were experiencing the most growth and job development by 1903.

Across England, the newly created Local Education Authorities (LEA) via the Balfour Act had the discretion, depending on location and local commerce and industry, to set their syllabi to fit the needs of the children in a particular place. In consequence, there was wide

[38] Darwin and Lyell are examples of famous natural scientists of the 19th century

variation in curricula between rural village and market town and urban center owing to the tax base and population, and to the attitudes of the LEA members who had been elected by the ratepayers. In urban areas, it was much more common to see a higher level of science education and a broadly ambitious syllabus was in place. In rural areas, science was important in connection to agriculture and raising livestock rather than preparing a boy for entry into industry or for laboratory work developing new technologies for industry.[39] A coastal locality might add maritime science such as navigation, shipbuilding, and commerce via oceanic trade to its timetable. There were broad standards for state-aided boys' schools to follow in order to receive grants for specialized science instruction, but much was left up to the locality to determine. In consequence the character and content of boys' science education varied greatly. This variety in syllabi was further complicated by the concept of streaming which divided students by ability and aptitude in schools, especially following the 11+ scholarship exam for secondary school admission.

The vogue for streaming became the mainstay of the rationalization of British primary and post-primary education by the 1930s. Streaming applied equally to boys and girls, and sought to single out, by exam, grades, and intelligence tests, the children best equipped to benefit from secondary education at age 11, if not sometimes prior to that point. These children, considered A stream, would be offered scholarships to attend secondary schools, but as has been discussed, scholarships did not remove economic barriers to continue in school, often past the leaving age of 14. The average children were classed as B stream, and continued their education in higher elementary schools, by 1930 known as senior schools, until the term during their 14th

[39] H.M. Inspectorate, *Education and the Countryside*, Board of Education Educational Pamphlets No. 99 (London: His Majesty's Stationery Office, 1934), 8524. Papers of Education in Primary Schools and Curriculum, Rural LB 1567. Trades Union Congress Collection. MET.

birthday.[40] These children would be taught the facts that the A stream was taught, but given little chance to inquire or research topics of interest to them. B stream got more practical, real world examples of science concepts. The C stream were termed "dull" students, or those not mentally handicapped but not academic in thought or performance. Their education had fewer facts and more very basic examples, concrete illustrations, and much more manual work in handicrafts like carpentry than laboratory work in physics. These students were educated only to be competent, dutiful workers and their curriculum often spoke to an enunciation of their social class role as workers rather than academic learning and analysis.[41]

The following discussion of science syllabi for boys should be considered as examples of broad educational sentiment regarding the type of instruction and the content covered, but will vary depending on location and date of publication. However, all sample syllabi included are from state-aided elementary and secondary schools and were attended by working-class children who only differed economically by the skill level of their fathers in their respective trades, unskilled to artisan.[42] (See Appendix for full reproductions.) These examples serve to illustrate the contrast between boys' curricula and girls' curricula, firmly delineating the gendered differentiation evident in science education between 1902 and 1944. The rigor and sophistication of the boys' science curriculum will be contrasted with the meagre offering girls received where the focus was on its practical application to household duties.

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[40] William Henry Hadow, *Board of Education Report of the Consultative Committee on the Education of the Adolescent* (London: H.M. Stationery Office, 1926).
[41] Bolton School Science Syllabus, September 1936. SxMOA1/5/16/49/H/6. The Keep.
[42] This, of course, can be a vast economic division between the child of a common laborer, and the child of a stone mason or master carpenter journeyman, but the important point is that this type of education was not only reserved for middle-class and elite children who received largely private education at fee charging institutions. For boys, the class divide was more permeable for the most capable intellectually. But the mass of working-class boys did not attend secondary school (5%) though far more working-class boys than girls (.05-1%) were afforded the opportunity through scholarships.

The place to begin to evaluate the development of science education since 1902 is the Committee Reports on *The Position of Natural Science in the Educational System of Great Britain*, published in 1918, that offered guidelines for elementary and secondary science instruction to improve science teaching's position following WWI.[43] The Chairman, J.J. Thomson and the membership of the committee presented how the science education should be carried out to provide the most efficient course possible to boys.

> The elementary school…serves as a preparation…[and offers] a general education and also in its function as a preparatory school it should include in its curriculum the teaching of Science in a simple and suitable form. It should normally include nature study and should be supplemented by instruction in elementary practical work…taken in connection with the teaching of arithmetic and handwork…With regard to time allotted to this subject we should not wish to lay down any hard and fast rule, but we suggest two periods a week [80 minutes] would be appropriate…[44]

With this guidance in mind, Thomson's committee found that elementary teaching left boys ill-prepared for practical arithmetic in the use of decimals, the metric system, and an understanding of measurement in mathematical functions. They recommended additional arithmetic courses at the elementary level to prepare those who would move to secondary schools.[45] For the boys who did attend secondary schools their curriculum was designed in two phases. The first was "a period of general education" to the first certificate examination at 15-16, and the second was a period of intensive specialization into a particular science, whether it be chemistry, or physics, from 16-18. The committee was concerned that boys should be particularly educated in the use of reason, of interpreting evidence based on its merit, and he should understand broad scientific principles and their occurrence in day-to-day life.[46]

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[43] Thomson, *Science Education in Great Britain*.
[44] Ibid., 37.
[45] Ibid., 22, 25, 37.
[46] Ibid., 25.

The main criticism of this Committee was that science teaching had become too specialized and too dominated by abstract experiments that were not related to real life and had become practically useless. It is important to note that the Committee did recommend simplifying the syllabus for the masses of students to connect it to lived experience. Another complication was that the Great War had caused the disruption of good science teaching where it existed as many teachers went to the Front. Science education was very much in a rebuilding phase in 1918 as the world learned of the advanced nature of German science and industry as opposed to Britain's. This report typifies the ambiguity of governmental reports on education and the syllabus to be followed and reflected why so much variation was beneficial and encouraged, but at the same time left much clarity and standardization to be desired.

Attempts to streamline and expand science education continued into the 1920s and 1930s. The following syllabus for a boys' school won an award by the *Daily Mail* in 1925 for best proposed syllabus and is far clearer with proposed timetables for all subjects. Ernest Melles' was headmaster at St. Luke's School in Chelsea, Southwest London. [47] (See Appendix for full syllabus)

Table 8: Mr. Melles' Boys' Elementary Curriculum

Subject	Form	Content/Skills	Periods Per Week	Duration per week
Religion	V-VII	Hymn and Assembly	5	75 min
Religion	V-VII	Bible Study, Old and New, Moral instruction	2	60 min
Reading	V-VII	Poetry, Prose, textbook reading	5	225 min
English	V-VII	Composition of paragraphs, essays, lecture copying	5	150 min
Arithmetic Three Years	V-VII	Fractions, Decimals practical, applied; averages, proportion, shares; percentages, interest, mensuration.	5	225 min

[47] Michael E. Sadler, *Our Public Elementary Schools* (London: Thornton Butterworth Ltd, 1926), 61-70.

History Three Years	V-VII	Norman, Plantagenet History; Tudor and Stuart Periods; Hanoverian Period	2	90 min
Geography Three Years	V-VII	British Empire, connect to history; Europe, North Africa; Brief survey of Africa, Asia, America	2	90 min
Science Three Years	V-VII	Elementary physics (experimental); Elementary mechanics (applied); elementary mathematics	2	90 min
Practical Work	V-VII	Woodwork or gardening	1 Afternoon	150 min

Mr. Melles' curriculum for ages 6-14+ shows a more moderate and humanistic approach to the elementary education of boys. This proposed timetable for the upper forms reflects the general nature of the curriculum where science courses are not taught in particular depth or complexity but are applied to what the boys would presumably see and understand in daily life. Far more time was given to arithmetic than to physics or chemistry as Mr. Thomson's committee proposed, granted, though the majority of their recommendations applied to secondary instruction. As boys neared school leaving age of 14, they received more practical training for potential careers, including manual labor. Lessons in arithmetic, history, and geography dealt with the modern industrial world of commerce and trade. This reflected a modest attempt by Mr. Melles to equip boys with essential life skills like composing a business letter, or understanding investment and stocks, though for many, even that concept of male citizenship in the economic life of the country would be very limited, as many working-class people could not afford to invest in anything besides burial insurance. At two periods per week in science, Mr. Melles' curriculum provided the most basic instruction in science. The other significant subject represented by Melles was religious instruction. The inclusion of this subject at the beginning of the syllabus signals its relative importance for working-class students, and though rather limited

in comparison to the Agreed syllabi in Chapter 2 which were predominant after 1925. However, the attempt to include lessons in faith and morality followed the Cowper-Temple clause conforming to the mission of elementary schooling to prepare students for their moral obligations as British citizens.

In 1926, Henry Hadow issued his Report, *The Education of the Adolescent* to the Board of Education which presented a broad overview of post-primary education and ways forward to make it more efficient for children. In it, he devoted space to recommendations on the curricula. Of those, included below are the Math and Science recommendations for boys' schools. Mr. Hadow departed from the work of Mr. Melles in proposing that instruction in math should advance beyond arithmetic and mensuration to include algebra, geometry and trigonometry to enable "intelligent comprehension of problems of everyday life."[48] His program of mathematical instruction included working with the four arithmetic operations to solve equations involving money, as well as fractions, and basic measurement. Hadow recommended general work in geometry by teaching formulae for volume and area, and then moved on to basic algebraic functions and equations. Ratios, calculating interest, rate of return on investments, and average, median and mean were recommended. Later courses would then move into trigonometry and the functions of sine, cosine, and tangent, as well as to logarithms and square root solutions. Hadow stated that this program of mathematics instruction "may be considered suitable for a four-year course in a non-selective Modern school for boys in an urban area."[49] But as with all curricular recommendations, Hadow left it to the localities and the teachers to determine which facets were of most value to their students.

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[48] William Henry Hadow, *Board of Education Report of the Consultative Committee on the Education of the Adolescent* (London: H.M. Stationery Office, 1926), 215.
[49] Ibid., 220.

Of science curriculum, Hadow wrote that at the time, 1926, the year of the General Strike, and during a period of depression, that there were too few schools with proper labs and adequate apparatus to carry out more advanced work in physics and chemistry.[50] However, where provisions could be made, the upper form higher grade schools could run a four years course which would include:

i. The chemical and physical properties of air, water and some of the commoner elements and their compounds, and the extraction of metals from ores.
ii. A carefully graduated course of instruction in elementary physics and simple mechanics, illustrated by means of easy experiments in light, heat, sound, and the various methods for the production and application of electricity.
iii. A broad outline of the fundamental principles of biology, describing the properties of living matter, including food, the processes of reproduction and respiration, methods of assimilation of plants, the action of bacterial organisms, etc.
iv. Instruction in elementary physiology and hygiene based on lessons in biology.[51]

In many regards, these outlines by Hadow echo the suggestions of J.J. Thomson in 1918. Curricular recommendations thus moved away from esoteric lab work to practical and simple experiments based in real life experience. Hadow desired that as with math, the sciences be integrated and taught in relation to one another rather than as discrete entities.[52] Hadow and Thomson were great critics of the overspecialization of the curriculum because it caused the efficiency and utility of elementary education to go down. What they wanted was not an academic working-class but a technically competent one where mathematics and science were concerned. To meet that end, the curricula of elementary schools needed to remain focused on the broader mission of turning out dutiful citizens who would carry forward social values like thrift, self-help, and respect for institutions in their working lives.

[50] Ibid.
[51] Ibid., 222.
[52] Ibid., 225.

The most ambitious boys' school curriculum catalogued was at the Bolton Boys' School as a part of the Worktown Mass Observation program which sought to carry out ethnographic and sociological research in a typical Northern, industrial town. Bolton, which is near Manchester, fit that criterion for the investigators. Where other syllabi were very conservative with time for science, the Bolton Boys' Senior School Syllabus is a secondary level syllabus, heavily science-based, and strove to attain those lofty levels of breadth and depth of understanding in chemistry, physics and biology. Similar to guidance outlined in other syllabi above, Form I students had a basic grounding in nature study, weather, and the earth and heavens. The Bolton School appears to be one which students from elementary schools transferred to and that might mean that those students did not reach the same level of attainment in science as boys who attend it through their whole school career.[53] On entering at 10 or 11+, the boys here were streamed into A, B with Science emphasis, and VB who took a more basic course and would not prepare for the J.M.B School Certificate Exam.[54] Form II students continued a course in nature study and earth science, and expanded into gasses, plant respiration, temperature, and fossils. These students had 3 periods per week. Stream A students got more depth in coverage, with dedicated textbooks, homework, and an increase in class time to 5 periods per week. The syllabus directed that the sections of "chemistry, physics, and biology…should be connected as far as possible."[55] Here, transpiration, respiration, and solutions were to be emphasized. At Form II, work began in physics and was connected to chemistry and was taught in connection with mensuration of areas, volume, mass and weight. Students then moved onto common gasses.

[53] Bolton School Science Syllabus, "Middle School General Science Notes," SxMOA1/5/16/49/H/6. The Keep, 1188.
[54] Ibid.
[55] Ibid., 1190.

Third form students continued along the same lines. Now stream A had fewer courses at 5 than Science emphasis B with 7 periods, and 3 nights of homework instead of 4. At this stage, physics work included mensuration and was assisted by the use of basic tools and apparatus like Vernier calipers. Labs tested buoyancy, temperature, density, magnetism, static electricity and measurements in time. No fewer than 17 laboratory experiments were planned for physics work alone.[56] In chemistry, third form students were taught the history of major discoveries and developments like Boyle's work, and then they learned symbols and formulae for equations where the whole textbook was to be covered. In biology, content was divided between botany and zoology. Both aspects were concerned with seasonal changes that impacted plants and animal habits, as well as plant reproduction their and various habitats. Later, animal skeletal systems, circulation, and the observation of birds and fish were covered.

Form Four saw an increase in classes per week to 8 for stream A and for stream B with science emphasis. The latter had one more night of homework, at four, than stream A. The physics course introduced properties of matter and dealt with force, graphical mathematics and calculation, simple machines such as a lever, inclined plane, and a wheel and axle. Boys learned equations of motion and acceleration, Boyle's Law of air pressure, the volume of gasses, and changes due to temperature and pressure. Later lessons included work in heat, light, and magnetism. Again, seventeen individual labs were proposed for the course to teach these concepts.[57] Work in chemistry dealt with acids and bases, oxidation, reduction, isolation of metals; the absorption of substances through membranes and in water. Students learned of diffusion of gasses, kinetic theory, and gaseous exchange in plants and animals along with the study of sugar, starch, oils, fats and proteins in food. Fifteen laboratory topics were planned

[56] Ibid., 1198.
[57] Ibid., 1203.

through the course. In botany, a more detailed study of plants and reproduction ensued with more detail on the transpiration of gasses, energy in seeds and germination, and the work of bacteria to connect its principles to chemistry. Six varieties of lab work were recommended. The zoology section saw more instruction into the various plant and animal phyla; invertebrates and vertebrates were studied, along with the function of muscles and joints in vertebrates for locomotion, respiration via gill or lung, blood circulation, and human digestion.

Form Five students in stream A and Science emphasis B both kept 8 periods of study, leaving B stream at 6 periods. At this level, the students would be preparing to take the school certificate exam, and the Joint Matriculation Board exam in Science. This meant that students in this year would be 15-16 years old, and the two higher streams would take the full exam, and the third would take only one paper for the exam and would not qualify to continue to university education.[58] Students who passed the exams could continue for two more years through the sixth form and take advanced courses in combinations of science including:

a. Chemistry, Physics, Mathematics
b. Chemistry, Physics, Biology
c. Chemistry, Biology, Geography
d. Physics, Pure Mathematics, Applied Mathematics

At the sixth form, only top students from the A stream and Science emphasis B stream remained at school. The students took 7 periods of science per week, in two double length classes and one triple length. They also had 3 nights of homework. Boys who had passed their exams studied for university scholarships such as the Whitworth.[59] The character of the work at this level was

[58] Ibid., 1208.
[59] Science and Whitworth Scholarship Exam Amendments, ED 54/27, The National Archives, Kew. (Hereafter, TNA); Scholarships for Artisans, Whitworth, ED 54/30, TNA.

broadly self-directed through private study, but students did receive 3 periods instruction in the subjects taken per week.[60]

In totality, the Bolton School syllabus represents the highest possible attainment in science education that a boy in Britain in the 1930s could receive regardless of the prestige of the school he attended. The actual attainment of boys in science likely lies in-between Mr. Melles' syllabus and Thomson and Hadow's suggestions for a minimum of two periods per week – a far cry from five to eight at the Bolton School. However, the fact that the Bolton School had such a lofty and academically advanced syllabus shows that the demand for science instruction in industrial centers did not decline following 1902 and the Balfour Act. Further, it reveals that the sons of artisans and skilled workers could attend a local secondary school on scholarship and compete for university placement in science if they were so inclined. For those boys, the class divisions they were born into dissolved by the merit of their own intellect and effort. This syllabus and its success in Bolton foretold of the benefit universal secondary education could afford to the children of the masses. After 1944 and the Butler Act, secondary education was no longer fee charging unless a child attended a private school like the elite public schools. More would be done to improve the conditions of the working-class following the end of WWII through free secondary education.

The various syllabi reflect the range of possibilities of educational attainment for boys' schools in England between 1918 and 1936. These documents serve to demonstrate the range and balance of science content compared with other subjects in the school day. While some are modest, others were very advanced and rigorous courses of instruction. The point of this analysis of the character of boys' science syllabi is to note what was possible for the working-class

[60] The Bolton School Science Syllabus, SxMOA1/5/16/49/H/6, The Keep, 1209.

student to learn, and to contrast it with the dramatically different if not wholly unsuitable education in science that most working-class girls received. Far fewer girls were able to attend secondary schools on scholarships due to gender bias and economic conditions discussed above.[61] The science education offered to girls connected it to biblical principles of a woman's role in the home as wife and mother. It was not the technical, academic set of subjects boys learned. By analyzing girls' syllabi, it is possible to see how far gendered bias influenced girls' education and what the State's intent of a girls' education was.

Girls' Science Education

Though gendered differentiation of curriculum seemed logical, small variances ended up having dramatic impacts on girls' education. For instance, educationalists thought it customary to separate boys' handwork courses from girls. Boys began taking carpentry or gardening while girls took needlework – a skill considered indispensable to girls who would grow up to make or repair clothing for their families. In the 1890s, laundry and cookery came on the scene as valuable subjects to train girls in the practical tasks that would govern their adult lives. Science education for girls took almost invariably a domestic route, and this route was deemed the best sort of education a girl could receive. When recounting the history of emerging science education in the 1860s, where provision was scant even in the elite public schools, J.J. Thomson reflected that, "for girls even these limited opportunities did not exist. Information about their education at this period is scanty, but it may safely be said that no organized instruction in Science was available to them."[62] Thomson went on to evaluate the position of girls' secondary science provision, as it existed in 1916-1918. He wrote:

[61] Matthews, *Post-Primary Education in England.*
[62] Thomson, *Science Education in Great Britain*, 6.

> At present 333 girls' schools and 244 mixed schools (with a population of some 95,000 girls) are in receipt of Parliamentary grant… a considerable proportion of [girls] attending schools…over a period up to the age of 18 or 19 have not in the past looked forward to entering any professional occupation; indeed few professions except that of teaching have been open to them. There is in consequence proportionately less advanced work done [in Science] in girls' schools than in boys' secondary schools of similar type…In the last forty years the ideals of women's education have been raised and the opportunities vastly increased, but there still remains some uncertainty in the public mind, …as to the nature of the education to be provided to girls and the relative importance of the various subjects. Some parents still confine their ideas of education to literary subjects together with music and art…While the majority of parents of these girls desire or at least [are] prepared to acquiesce in a secondary education for their sons in which Science shall find a place, [but] the recognition of Science as an essential element in the secondary education of girls is far less general. This applies with even greater force to Mathematics.[63] …We were not surprised to learn…that in a large number of private schools [for girls] Science was altogether omitted from the curriculum.[64]

Given these limitations, Thomson's committee gave a brief analysis of the timetable in girls' schools that had been inspected for their Parliamentary grants. Whereas in the boys' syllabi above, approximately 27.5 hours per week were spent in the classroom, by contrast most girls' schools held only 19 hours of classes. Of that time, science received 1/10th of the class time allotted, or two hours, or worse one and a half hours. For girls, after the age of 13, science and math were abandoned completely for a year's teaching in domestic subjects.[65] Thomson's committee noted that the shorter time spent on girls' science was due to the lack of laboratories and apparatus in their schools. Furthermore, women science teachers were not as well trained as men because women's education only advanced to the teacher training level, not a university level that men received. To complicate matters, fewer science scholarships were awarded to women than men, in part because fewer women were qualified to sit the exams.[66] In terms of curriculum, Thomson's committee recommended expanding the girls' school week to 24 hours

[63] Ibid., 15.
[64] Ibid., 16.
[65] Ibid.
[66] Ibid., 17.

where possible, and that science should take up 1/7th of class time, or 3 hours as opposed to 2 or less. They felt mathematics should be taught in connection with science and not as a series of subdivided subjects such as algebra, geometry, and trigonometry to save time and to prevent over teaching mathematics to girls. This would allow more time in the school week to be devoted to science. The science curriculum was taught in the following way – to age 12, nature study was the general science instruction given; from age 12 to 14, elementary physics and chemistry were introduced; at 14-15, botany was given. Any advanced science work for girls was usually in botany, and more rarely, chemistry. The committee noted the general neglect of physics instruction in girls' schools, because they argued a lack of physics meant a lack of qualified female science teachers and fewer women entering the nursing profession. The committee believed that regardless of gender, all children should receive training in science and the scientific method as it was invaluable to a knowledgeable adult life.[67]

What is significant in Thomson's report is that science, as we today would conceive of it, was an afterthought or superfluity for educationalists and parents even in 1918, following WWI, which saw record numbers of women and girls taking up technical jobs in munitions factories and in other industries for the war effort. Class is of course an important distinction here. It is evident that the majority of girls in secondary education at the time of this Report were from middle-class or elite families who would not have needed to work in such industry, and would not need science training. However, the shorter school day for girls is something worthy of critical examination. Why would it be necessary to shorten a girl's education and limit the time she had to learn various subjects? The following Report provides the answer to this critical problem in the unequal provision of education to girls as compared to boys.

[67] Ibid.

The 1923 Hadow Report on the *Differentiation of the Curriculum for Boys and Girls Respectively* was far more damning to girls' education as it reinforced the status quo, especially for girls' science education. In it, the testimony given to the committee by physicians and psychologists made the claim that biologically, the female child was less suited to rigorous academic work due to differences in her physiology and in her ability to cope with stress and criticism.[68] They go so far as to blame this on a girls' menses which drained away blood from the brain, and caused her to be more fatigued and less able to focus on mathematics or science.[69] Much as Foucault wrote in *The History of Sexuality*, men used scientific knowledge to develop technologies of knowledge power which relegated the woman's mind to a series of neuroses tied to her biological sex.[70] In this regard, the advance of the science of the brain had only doubled down and confirmed the opinions of male experts of the mid nineteenth century, and saw women as weaker because of their nervous afflictions, that they were fundamentally different and should have a different kind of education on that basis. In addition, because girls were expected to assist their mothers at home after school, the school day was shortened, and Hadow recommended restricting the amount of homework.[71] However, Hadow was keen to moderate the expert testimony by noting that far more variation in ability and growth and development existed within a gender than across genders. Nonetheless, the evidence given advocated that girls needed a different kind of education which was less academic, and less cluttered with esoteric subjects.[72]

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[68] William Henry Hadow, *Differentiation of the Curriculum for Boys and Girls*, 61, 66, 73.; See Also, Mathew Thomson, *Psychological Subjects: Identity, Culture and Health in Twentieth Century Britain* (Oxford: Oxford University Press, 2006).
[69] Hadow, *Differentiation of the Curriculum for Boys and Girls*, xv, 73.
[70] Michel Foucault, *The History of Sexuality, Vol. I: An Introduction* (New York: Vintage Books, 1990).
[71] Hadow, *Differentiation of the Curriculum for Boys and Girls*, 60.
[72] Ibid., 48, 58-59.

The girl's education would be a practical basis that would prepare her for life upon her marriage.[73]

Given the rationale for a shortened school career and the aim of education to prepare girls to be homemakers, Hadow's committee gave a brief overview of the general secondary syllabus that was accepted at the time. They stated:

> The curriculum must comply with certain conditions laid down with the object of securing proper attention to the cultivation of body and mind through physical training and games, bookwork, and the practical use of the pupil's faculties. It must in all cases make provision for instruction in English Language and Literature, in History and Geography, in Mathematics and Drawing, in Natural Science (including practical work by pupils), and in at least one other language other than English…It must also make such provision as the Board…can accept as adequate for organized games, Physical Exercises, Manual Instruction, and Singing; and as regards girls, it must include practical instruction in Domestic Subjects, such as Cookery, Needle-work, Laundry-work, Housekeeping and Household Hygiene. For older girls (over 15 years of age) Natural Science may be wholly or partially dropped, and Mathematics may be confined to Arithmetic, in order to make room for a fuller course in a combination of Domestic Subjects.[74]

The emphasis on domestic subjects and their substitution for physical science courses was a compulsory aspect of girls' education. The type of science girls could take was most often botany. Botany as a discipline was inoffensive in regard to the content and is based on observation rather than analysis and experiment. It was possible for the exceptional girl to forego extra domestic subjects at 15 to pursue a general experimental science course in physics and chemistry, but mostly, these girls were from the professional or middle classes.[75] The more common trend in the majority of girls' schools was to substitute "botany for the course in elementary physics and chemistry done by boys."[76] Further, where possible, mathematics never went beyond the basics of algebra and geometry, or was eliminated all together in favor of

[73] Ibid., 47.
[74] Ibid., 45-46.
[75] Ibid., 56.
[76] Ibid.

simple arithmetic, sufficient to allow girls to balance household accounts and to plan budgets. To illustrate the stark division of science versus literary and modern subjects in girls' and boys' schools, the following table included in the Report reflects the number of advanced courses available to girls and boys of 17-19 who had taken the first examination.[77]

Table 9: Advanced Courses Recognized for 1921-1922 in Secondary Schools in England and Wales on the Efficient List

	For Boys	For Girls	For Boys and Girls	Total
Number of recognized Secondary Schools	533	588	338	1,459
Number recognized for Advanced Courses	163	120	57	340
A) Courses (Science & Maths)	147	41	42	230
B) Courses (Classics)	35	2	--	37
C) Courses (Modern Studies)	44	101	35	180
Total	226	144	77	477

In this table, C) advanced courses in modern studies include history, geography, economics, and modern languages. It is important to note that the majority of girls' advanced courses fall into this category. On cursory glance, the status of girls' schools seems strong, outnumbering boys' schools by 55 single-sex institutions. But of girls' schools there are 43 fewer schools which offered advanced courses to girls. Of these, Science and Mathematics was the most often provided in boys' schools, as the Bolton School syllabus illustrated. Boys were offered advanced science courses at a rate of 3 to 1 of girls. Interestingly, virtually no girls' schools specialized in Latin and Greek instruction which was requisite for admission into Oxford or Cambridge at the time.[78] These data show that almost all girls' schools only taught modern languages. As such it is fitting that where girls' schools excelled was in Modern studies

[77] Ibid., 76.
[78] Paul Deslandes, *Oxbridge Men: British Masculinity and the Undergraduate Experience* (Bloomington, IN: Indiana University Press, 2015). Oxford accepted women in 1920, Cambridge in 1948 for degree conferral.

advanced courses for girls who were intent on entering college. Most shocking though was that only 1/5 of girls' schools offered any advanced courses at all. This may reflect the fact that most parents did not keep their daughters in school beyond the age of 15 or 16 as there was little economic benefit in it, if their daughters did not intend to follow a career or enter a college or university.[79] Or it may reflect the gendered bias against widespread higher education for girls and women, meaning there was less demand for these type of courses for girls.

Given this information on what subjects were considered worthy of university entrance exams versus what most educationalists thought was the most suitable education for girls it is important to briefly consider the character of domestic science courses offered at the time to get an idea of whether they were scientific at all. In the Report of 1923, the committee summarized that the majority of witnesses who gave testimony agreed that needlework should be given. Cookery was another popular subject with educationalists along with general housecraft. A few desired that laundry should be taught in connection to simple chemistry and physics, but the majority favored little alignment with science courses. [80]

These views are instructive because they revealed the conflict among educationalists regarding what science instruction was at its core. Is it a systematic, laboratory driven course in the use of the scientific method to develop the faculties of observation and reason in students, or is it an application of scientific principles to daily life? Both positions have been stated in the sources above. However, in the case of working-class children who did not attend secondary schools, their education had to be basic, and was driven by examples connected to daily life. This rule is doubly true for girls who, the Hadow Report of 1923 saw, as unable to follow the abstractions of examples in physical sciences and mathematics. The following chapter will

[79] Hadow, *Differentiation of the Curriculum for Boys and Girls,* 66, 71.
[80] Ibid., 71-72.

discuss in detail the attempts to integrate science teaching into domestic subjects and the effort to elevate the status of domestic science for the purpose of college entrance exams. However, in 1923, the status of domestic subjects was one that was unequal to physical sciences, and even ridiculed for using the term "science" to characterize the content girls were taught. This demonstrates that science meant a different thing for girls' education and that it was related more closely to moral and domestic concerns than a true exposition of physical science as taught to boys.

A return to Helen Dobson's syllabus for girls offers a useful comparison in science curriculum, compared to that of boys.[81] Her course begins at age 9 through 14+ and also envisions a 27.5 hour school week for elementary girls. Her scheme is outlined below in Table 10. (See Appendix for full syllabus.)

Table 10: Mrs. Helen Dobson Girls' Curriculum

Subject	Age	Content	Duration Per Week
English Literature	12-13	An Anthology of Poetry, Shakespeare	As a Block 7 hr 30 min
Reading	12-13	Abridged 19th Century Novels, individual work/selections	
English Composition	12-13	Forms of address in letter writing, accounts of tasks done in school, short essays with absolute accuracy in spelling and punctuation	
Grammar	12-13	Simple parsing of verbs; parts of speech	
History (Economic)	12-13	Saxon England; communications networks, medieval town and government, manorial courts, 1st parliament; England and the continent, Elizabethan voyages, the New World, the colonies and colonization; group discussion, homemaking and garden design	1 hr 30 min
Geography	12-13	The Atlas	

[81] Sadler, *Our Public Elementary Schools,* 71-90.

			1 hr 30 min
Religious Knowledge	12-13	Up to this point, religious instruction should have been purely unsectarian; From this point, girls should be instruction in the truths of the Christian faith.	2 hr
Housewifery	12-13	Household management; utensils and appliances, cupboard and stocking, making soap, cleaning regimens; linens; carpets and linoleum cleaning, aim at perfection and thoroughness; care of pipes, flues and chimneys	As a Block 9hr 30 min
Laundry	12-13	Theory work to precede practice	
Cookery	12-13	Restaurant meals preparation	
Mothercraft	12-13	Lectures by public health officials in fitted facility outside school	
Hygiene	12-13	Personal and family, simple ailments	
Drawing	12-13	How to plan and alter dress patterns, stenciling and embroidery design	
Weaving	12-13	Skilled work, products sold	
Raffia	12-13	Leather work, glove making, rug making, dexterity	
Needlework	12-13	Make a complete outfit over two years work, how to use patterns and follow instruction, the use of different materials, costs, and usage	
Children's Clothing	12-13	By groups create sets of clothes; how to make linen, mending, the use of a sewing machine	

Mrs. Dobson's curriculum provides several key insights into the differences between girls' and boys' elementary education. The first instance is the amount of time given to girls' subjects in English and Handicraft and Domestic Subjects. Under Mrs. Dobson's syllabus, girls received 1/3 of instructional time in English subjects, and another 1/3 in handiwork for the first three years of the course. Much of the emphasis in English and arithmetic stressed precision, accuracy, and even perfection of skills rather than an expanded course on new material—old material was drilled until it was learned by heart. History and geography emphasized social life and commerce as opposed to facts and dates. Science for girls, where given at all, consisted only

of nature study, and was absent altogether in the upper forms. At an hour and a half per week, it was barely a significant subject for girls' instruction. Instead, domestic subjects dominated the school week by age 12 at over 9 hours suggested time spent on its many subdivisions.

Domestic work was also graded in time efficiency, aesthetic sensibility, and perfection in performing household duties. There is little evidence in this syllabus that domestic subjects were allied with any scientific instruction beyond hygiene. Mrs. Dobson added a significant caveat to the final year of girls' Elementary instruction. She believed that those who remained in elementary school had proven themselves less clever and unable to take advantage of the opportunity to transfer into a central school (local high school) for more advanced instruction. As such, because they were educated on the taxes of the public, the public expected girls to be turned out for essential duties in the home. For Mrs. Dobson, the best education these girls could receive was a practical education in home duties so that these girls would cheerfully do their social duty. In this way science was subverted to the social role of the woman in the domestic sphere living a moral life and teaching her children the same values. This view, however, was divorced from the financial realities of working-class life and economic pressures during the 1920s when so many men, who had survived the Great War, were out of work, or women had to work because they were widows. Furthermore, it was not the case that most working-class girls were less intelligent and would not benefit from a secondary education. This is a blatant classed bias of working-class girls. The evidence, as presented in Chapter 6, reveals that economic pressures at home and the attitude of fathers against further education for daughters limited how many girls could accept the scholarships they earned to attend secondary school. As such, the

middle-class ideal of respectability and self-help dating from the mid nineteenth century persisted even though it was becoming outmoded itself.[82]

Where girls' science education was concerned, very little was the physical science their brothers learned. While most boys' schools would not teach biology as it was not, at that time, considered an experimental science, in girls' schools, it did gain ground by the 1930s. In some instances, girls at the elementary and secondary level learned about lower animals and the functions of the human body. Decorum usually limited the discussion prior to introducing reproduction and the excretory organs to the vast majority of girls. In many cases girls and boys got no practical instruction on human reproduction at all as evidence in Chapter 5 explains.

However, was one educationalist, Edith Cooper, who taught in the Birmingham area, was determined to introduce biology into girls' schools, albeit along the proper lines deemed socially appropriate for a girl to know. Miss Cooper wrote *A Science Scheme for Girls Based on Biological Teaching,* in 1930 in response to the introduction of Senior schools or Central schools which were an expansion of secondary education in Britain at that time.[83] These schools accepted pupils from age 11+ for a 4 years' course of study, which meant most girls stayed until they were 15 or 16 as opposed to leaving following the semester that she turned 14, which was the rule for Elementary schools. Miss Cooper stated the need for basic biology instruction as follows:

> Parents and teachers have often consulted their own feelings as to 'what was easy or comfortable to teach,' with regard to personal hygiene, rather than 'what was good for the child to know.' We must no longer be content to allow this attitude to continue. Ignorance has caused many girls to stumble into bad habits; morbid curiosity has led to seeking information from undesirable or impure sources. We must assist the girl to adjust her mental powers so that she is able to develop a sane and balanced view of the facts of

[82] Thompson, *The Edwardians: The Remaking of British society*.; Simon Szreter and Kate Fisher, *Sex Before the Sexual Revolution: Intimate Life in England 1918-1963* (Cambridge: Cambridge University Press, 2010).
[83] Edith Cooper, *A Science Scheme for Girls Based on Biological Teaching.* (London: National Union of Women Teachers, 1930), 4.

> life, and her relative position in the world of which she is a part. We must enlighten and broaden the girl's mind, so that she can utilize her knowledge in the practical conduct of her own life, in the care of her own health and happiness, and for the benefit of future generations. She must take an intelligent interest in the health of her own community; in short, she must understand her citizenship…One means to this end has been found in a simple course of biological study.[84]

For Miss Cooper, it was imperative to educate girls in the science of their bodies because the industrial world posed so many threats to a girl's virtue, and to her exercise of citizenship (motherhood). She claimed that girls would "meet with those who are ever ready to pollute the young mind with evil suggestions, and who would seek to destroy reverence for Nature's plan of reproduction."[85] For Cooper, biological science was a weapon in the arsenal to protect a girl's virtue and virginity; it was not unlike the verses on the armor of God as told in Ephesians 6:11-13:

> Put on the full armor of God, so that you can take your stand against the devil's schemes,
> [12] For our struggle is not against flesh and blood, but against the rulers, against the powers of this dark world and against the spiritual forces of evil in the heavenly realms.
> [13] Therefore put on the full armor of God, so that when the day of evil comes, you may be able to stand your ground…[86]

This syllabus was intended to serve girls of various ages, 8-11 or 12-15, and of various abilities. Cooper wrote that the syllabus could be broken down in "the simplest way for the simplest minds, or that it may be enlarged and varied" to fit the locality, rural or urban, or for the "intelligence capacity" of students.[87] While this curriculum was certainly more scientific that Mrs. Dobson's syllabus, what is evident is that in regards to girl's instruction, science was used to support religious teaching and precepts about the right moral conduct of girls in society. The syllabus said nothing about what boys should do to prevent unwed pregnancies. This is the key

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[84] Ibid.,
[85] Ibid., 5.
[86] Ephesians Ch. 6 Verses 11-13, The Holy Bible, New International Version.
[87] Cooper, *A Science Scheme for Girls Based on Biological Teaching*, ibid.

takeaway, for girls' science and religion went hand in hand with the goal of protecting their role of wife and mother in British society.

Of the curriculum for Junior elementary students between age 7 and 10, Miss Cooper proposed four general aims. The first aim was to "arouse interest and enthusiasm for the life of Nature [sic] around them every day" by means of allowing the children to collect flowers and other specimens on their own. The second aim was to "train [girls] in observation, to bring to [their] notice the wonder and beauty of all living things," by allowing girls to make scrapbooks for stories, poems and rhymes on this theme. The third aim was 'to teach mothering and fathering of plants, birds, and animals," and to use drawings, models, or designs to allow girls to imitate what they have observed. And the final aim was to teach girls "early, the love of outdoor life, and to train the imagination by making the plant alive, breathing…" by conducting experiments on the growth of plants, and visits to gardens and museums, and different local environments.[88] Table 11 outlines her scheme by age group. [89]

Table 11: Edith Coopers' Science Scheme for Junior Pupils, Aged 7-10

Age	Topics	Observations/Experiments
7	Growing a plant from seed, collections of specimens, teach a love of collecting, and an interest in growth of organisms. Facts are far less important than interest and observation	Flowers: Buttercup, Violet, Dandelion; Trees and leaves; Birds: Robin, Blackbird Animals: Goldfish
8	How do plant children grow? How do Animal children grow? How plants and animals become sick	Flowers: Celandine, Campion, Bluebell; Trees: Sycamore; Birds: Cuckoo, Swan; Animals: Silkworm
9	How do plant and animal children grow? Flower pollination and fertilization, frog spawning; Bird families, nest building, mating, feeding, caring for young.	Flowers: Daisy, Daffodil, Cowslip; Trees: Oak, Apple, Lime; Birds: Swallow, Sparrow; Animals: Butterfly
10	How do plant and animal children grow? Further lessons on the preparation of animal homes like fish, rabbits, care of young,	Flowers: Marigold Trees: Birch, Beech Birds: Thrush, Owl

[88] Ibid., 20.
[89] Ibid.

	teaching birds to fly, mammals feeding young with milk, Every cell has a job, fresh air for good health	Animals: Squirrel

The guidelines for this unit of study for younger girls is quite different in character than only a nature study, which usually limited its content to plant life. Miss Cooper had made biology instruction suitable by connecting it to elements of human life. In anthropomorphizing plant and animal young as children of two loving parents, Cooper was training the girls to see Nature's plan in creating nuclear families where mothering was emphasized not only to make the content relatable to young girls, but to teach them that the right role of a woman was to marry and raise a loving family. It went further than the boys' curriculum in introducing animal mating, which Thomson had discouraged for boys' instruction. Cooper's course relied on observation, but not for critical analysis and objective fact, but for imitation in later life as a wife and mother. Table 8 demonstrates how the curriculum and content was expanded for 11-15 year -old students at the senior school. [90]

Table 12: Edith Cooper's Science Scheme for Senior Pupils, Aged 11-15

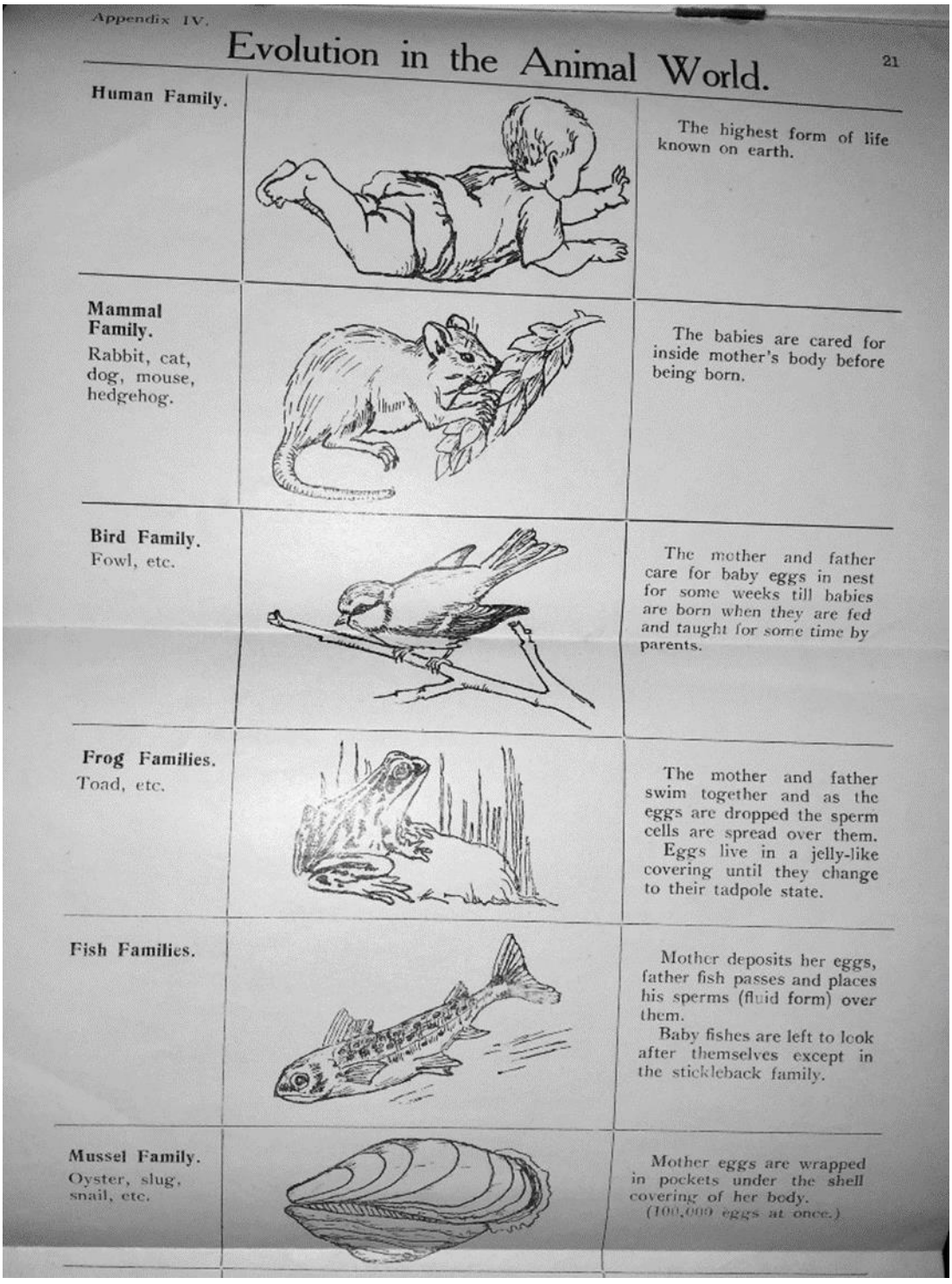
Age	Nature Study	Chemistry	Physiology	Hygiene
11 to 12	Trees and Flowers; Amoeba, Hydra, Worm, Crayfish	Air: composition and properties Water: composition, filtration, properties	Respiratory system Circulatory system Intro to excretory organs leading to a Personal Lesson	Ventilation Coughs, Colds, Germs
12 to 13	Hazel, Primrose, Molds; Butterfly, mussel, hedgehog, frog	Food as nourishment for plants and animals, starch, proteins, fats, oils, sugar, salts, microscopic study	Organs of digestion, organs of excretion, Skin, nails, hair, teeth. Personal Lesson	Diets for health; indigestion constipation headache triangular bandages
13 to 14	Elm, dandelion; Ant, Bee, Lady-bird, Rabbit	Review, Experiments in dietetics, use of microscope	Muscular system Nervous system Skeleton, large bones Personal Lesson	Symptoms of disease, infections, sanitation of lavatory, drains,

[90] Ibid, 19.

				sinks; The medicine cabinet
14 to 15	Mosses, Ferns; Baby: Prep for arrival, a bassinette, cradle, layette; how to wash, feed, clothe, care	Additional experiments in domestic science, microscopic studies	Anatomy, skeleton, joints, bones, fuller study of organs of body Personal lesson before leaving school on reproduction	Simple electric appliances, Public health services; first aid in accidents, splints, artificial respiration

The overview of the senior girls' syllabus in science instruction does combine aspects of biology in nature study and physiology, chemistry in understanding air, water, respiration, ventilation, and general health as well as food and food values which would be emphasized in cookery courses. Hygiene teaching addressed how to treat infections and how to maintain a healthy home environment. Miss Cooper's syllabus was an attempt to ally physical science teaching and experimental practical work as in boys' schools to the girls' curriculum. By the 1930s, the status of domestic subjects as a means to teach physical science had gained credibility, as Chapter 4 will discuss. However, the point of the instruction was the culmination in human motherhood and human reproduction in the final Personal Lesson in physiology. In fact, Miss Cooper's scheme reads much like a scientific version of the order of creation set forth in Genesis and the notion of the great chain of being, which she terms "Evolution in the Animal World." This evidence in Figure 1 and Figure 2 [91] below illustrate how biology should be taught to emphasize motherhood and to make human reproduction less of a mystery and more of a purpose for a girl's life.

[91] Ibid., 21.

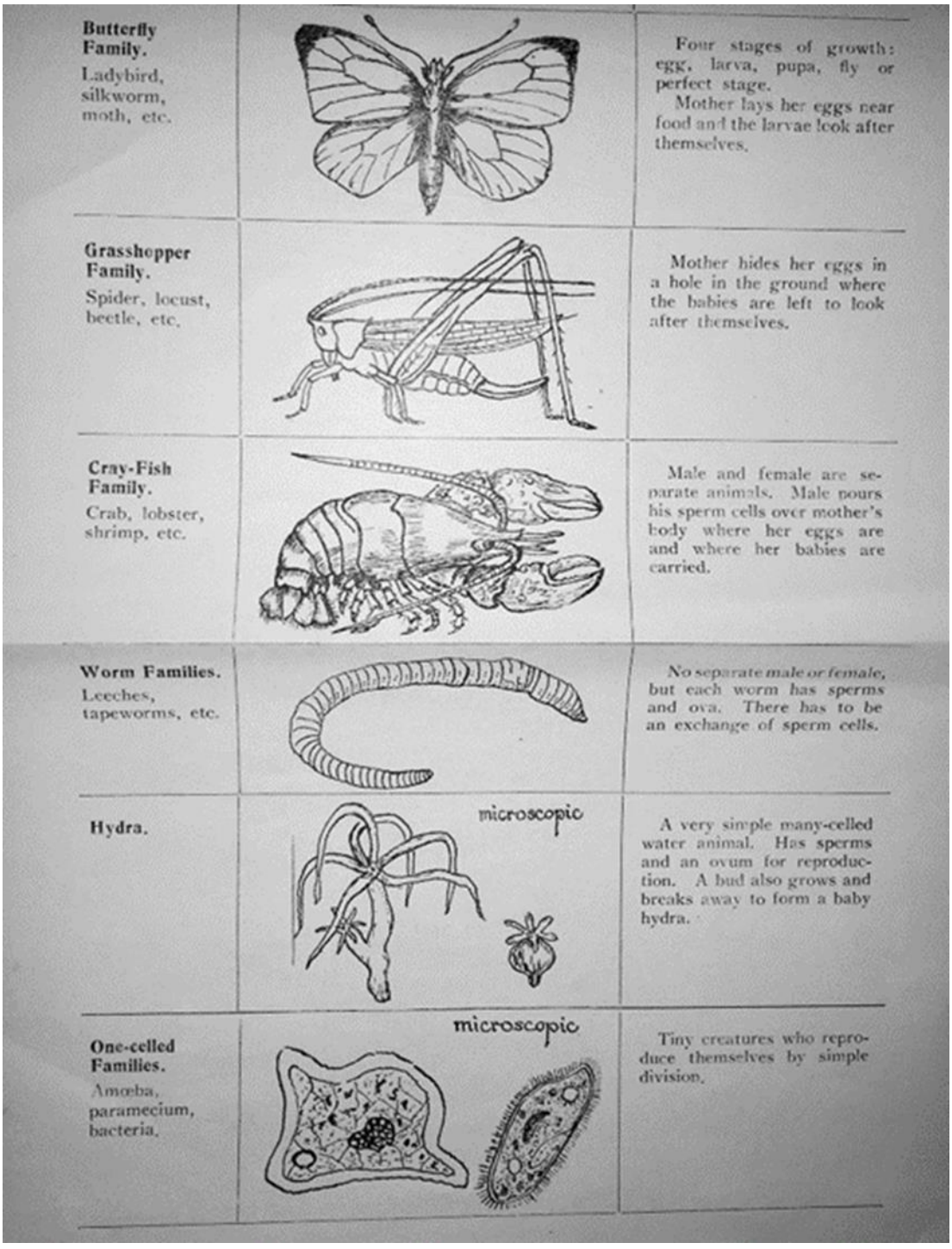


Appendix IV.

Evolution in the Animal World. 21

Human Family.		The highest form of life known on earth.
Mammal Family. Rabbit, cat, dog, mouse, hedgehog.		The babies are cared for inside mother's body before being born.
Bird Family. Fowl, etc.		The mother and father care for baby eggs in nest for some weeks till babies are born when they are fed and taught for some time by parents.
Frog Families. Toad, etc.		The mother and father swim together and as the eggs are dropped the sperm cells are spread over them. Eggs live in a jelly-like covering until they change to their tadpole state.
Fish Families.		Mother deposits her eggs, father fish passes and places his sperms (fluid form) over them. Baby fishes are left to look after themselves except in the stickleback family.
Mussel Family. Oyster, slug, snail, etc.		Mother eggs are wrapped in pockets under the shell covering of her body. (100,000 eggs at once.)

Figure 1: Edith Cooper's Evolution of the Animal World Part 1



Butterfly Family. Ladybird, silkworm, moth, etc.		Four stages of growth: egg, larva, pupa, fly or perfect stage. Mother lays her eggs near food and the larvae look after themselves.
Grasshopper Family. Spider, locust, beetle, etc.		Mother hides her eggs in a hole in the ground where the babies are left to look after themselves.
Cray-Fish Family. Crab, lobster, shrimp, etc.		Male and female are separate animals. Male pours his sperm cells over mother's body where her eggs are and where her babies are carried.
Worm Families. Leeches, tapeworms, etc.		*No separate male or female,* but each worm has sperms and ova. There has to be an exchange of sperm cells.
Hydra.	microscopic	A very simple many-celled water animal. Has sperms and an ovum for reproduction. A bud also grows and breaks away to form a baby hydra.
One-celled Families. Amœba, paramecium, bacteria.	microscopic	Tiny creatures who reproduce themselves by simple division.

Figure 2: Edith Cooper's Evolution of the Animal World Part 2

The illustration set forth in Figures 1 and 2 begins with single-celled amoeba families, though not in the sense of Linnaeus' Taxonomy system which describes families of like organisms. Each level anthropomorphizes the role of the animal parents in rearing their young, attaching sentiment and love to the assumption that all reproduction in nature is based in sympathy rather than instinct and the urge to survive. Mammals are the most caring parents, and humans are the highest form of life, just as in Genesis, and the role of human parents in rearing a child reveals God's or Nature's plan (as Cooper terms it) for the lives of boys and girls, with motherhood being the highest object a girl should aspire to. Miss Cooper could be called ingenious for finding a way to bring in biology and a knowledge of the facts of life to working-class girls, who otherwise went without that information due to its taboo status in society (See Chapter 5). On the other hand, it is clear that science education for girls would not have parity with the boys' curriculum until the 1970s in Britain as long as the notion of motherhood was highlighted as the ideal in citizenship as well as in moral station in society. Other factors such as funding for girls' science laboratory equipment and apparatus, a bias against higher education of girls, and the sense that science was not a subject that girls needed in order to be successful in life mitigated how objectively and rationally science was taught to girls.

The evidence above clearly shows a gendered differentiation in girls' science curriculum between 1902 and 1944, and that it significantly limited a girl's ability to seek a career if she either did not attend secondary school or was not taught along the same lines and rigor as boys. It is evident that educationalists thought it was unhealthy and unnecessary for girls to attempt science courses, ironically, given their appeals to the science of physiology and psychology by experts. Simply put, the girl's place was in the home, and the boy's place out in the world, earning a wage. That was the desired form of citizenship that the British State sought to enforce,

and the preferred moral position of its working-class women. In a time of unprecedented social change, the social status quo was the way forward for British society.

The following chapter will demonstrate how the advent and expansion of domestic instruction courses in both British primary and secondary education tied morality to domestic duty. As Chapter 2 contended, and as Chapter 3 has shown, religious ideology influenced the whole of girls' curriculum to emphasize one social end – motherhood. The domestic instruction courses girls received tied that conception of motherhood as citizenship to the idea of mother as moral signpost –thus combining duty and example in girls' elementary education.

Chapter 4 Domestic Subjects Instruction

Introduction

Circumstance is a cruel master. One woman, Mary Hollinrake, was fortunate enough to receive a secondary education and to become a teacher, while another, Lottie Barker wanted to become a teacher, but family finances and home obligations kept her from pursuing secondary education. Hollinrake had the benefit of science classes along the lines of boys, in an equipped lab. Barker had no such exposure. For Hollinrake, domestic science was different than she had expected. She wrote that it "was not so much a cooking class as how to make scrubbing powders and polishes, how to cut up and dry soap and be more economical in general."[1] Barker perhaps loved schooling more than Hollinrake, and sat exams to continue on to secondary school, but her family could not afford the added expenses of uniforms and travel. Instead, Barker "left school the day I was thirteen and [was] told, that now I was to stay home and look after my younger sister Liz and brother Tom…I became a little drudge."[2] It is certain that Barker got some education in domestic subjects, though she preferred the academic subjects more. But life dealt her a disappointment in preventing her further access to education. Now she had to practice what she had been taught in keeping house for her own family and that of a neighbor. One girl got the academic education, and the other the practical education of real-life domestic duties. It was for domesticity that the vast majority of working-class girls were educated and within domesticity that they were meant to find their purpose.

[1] Mary Hollinrake, "Lancashire Lass," 2-413. John Burnett Archive of Working-Class Autobiography, Brunel University. 1839. (Hereafter, Burnett).
[2] Lottie Barker, "My Life as I Remember It, 2-37., 1474-1475. Burnett.

As such, elementary education in Britain had at its foundation a civilizing mission based in Christian formulary to elevate the condition of the children of the working poor, much like Lottie Barker, while keeping them in their place as mothers of the masses. In the first thirty years between 1870's Forster Act and the Butler Act of 1902, the advance of the curriculum and the creation of trade, industrial, and training schools for the further education of the working-classes meant that average people had more access to education to equip them for their duties as adults. Despite the rage for an expanded elementary curriculum which seemed to indicate to the polite middle-classes that the conditions of the poor had been raised mid-1880s by the work of social reformers like Lord Brougham, the reality remained grim. Plans for the improvement of living conditions of the very poor through slum clearances and model community building had backfired, creating more densely packed slums. Only a new era of social investigation and mobilization efforts for the Boer War brought to light the stark reality that most urban poor were living in squalid conditions still, thus affecting national readiness for war.[3] Charles Booth's survey of poverty in London during the 1890s, and Rowntree's work in York, brought to bear the reality that one third of the urban population lived in poverty and suffered from poor health and poor life prospects due to it. [4] More troubling still was the fact that in 1899, at the outset of war in South Africa, somewhere between 40 and 60 percent of all military recruits were deemed unfit for service based on poor health stemming from malnutrition and the unsanitary conditions of urban industrial life. [5]

[3] *Transactions* of the National Association for the Promotion of Social Science. 1857-1886.
[4] Charles Booth, *Life and Labour of the People in London*, First Series, *Poverty*. Vol. 1-4. (London: Macmillian, 1902).; B. Seebohm Rowntree, *Poverty, A Study of Town Life* (London: Longmans, Green and Co., 1922).
[5] J.M. Winter, "Military Fitness and Civilian Health in Britain during the First World War," *Journal of Contemporary History* v 15 no 2 (April, 1988) pp 211-244, 211.

The shock of such devastating statistics at the turn of the 20th century revitalized the middle-class effort to promote self-help, thrift, and respectability among the working-class, via education, and in particular, through domestic subjects which were almost totally the preserve of girls' education in Britain.[6] Educationalists who tied morality and hygiene to citizenship carried the civilizing mission forward. The Hadow Report on the *Differentiation of the Curriculum* enunciated the view that given the difference in boys' and girls' social functions, "we assume that all children have to be educated with two ends in view—to earn their own living; to be useful citizens;" while girls also had to be prepared to become homemakers.[7] For working-class girls, this meant that no longer could their own mothers be trusted to instruct them in, what was broadly termed housecraft, or alternatively, housewifery.[8] Instead, the schools would educate girls in the principles of hygiene and efficiency in every aspect of caring for the home and the family. Educationalists and medical officers thought that the simple education in hygiene and infant care could combat the still high figures for infant mortality.[9] By 1900, domestic education was no longer limited to needlework, and laundrywork, but also encompassed cookery, care and cleaning of the home (housecraft), care of infants and invalids, hygiene and first aid.[10] This instruction was carried out along lines that allied it with applied chemistry, physics, biology, and physiology, and later on, bacteriology. For girls, their exercise of citizenship was tied to the

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[6] Gertrude Himmelfarb, Poverty and Compassion: The Moral Imagination of the Late Victorians. New York: Vintage Books, 1991.; Himmelfarb, The Idea of Poverty: England in the Early Industrial Age. New York: Alfred A. Knopf, 1984.; Leonore Davidoff and Catherine Hall, *Family Fortunes: Men and Women of the English Middle Class, 1780-1850* (Chicago: The University of Chicago Press, 1987).; Mary Poovey, *Uneven Developments*: *The Ideological Work of Gender in Mid-Victorian England* (Chicago: The University of Chicago Press, 1988).

[7] William Henry Hadow, *Board of Education Report to the Consultative Committee on Differentiation of the Curriculum for Boys and Girls Respectively in Secondary Schools* (London. H.M. Stationery Office, 1923), 126.

[8] National Council for Domestic Studies, "Eighth Annual Report," 8. 1926, ED 276/1. The National Archives, Kew. (Hereafter, TNA)

[9] Circular 758, Board of Education Memorandum on the teaching of Infant Care and Management in Public Elementary Schools, 1910, 2, "120 infant deaths per 1000" is the figure given. ED 142/41, Circulars 1909-1914. TNA.

[10] Hadow, *Differentiation of the Curriculum for Boys and Girls,* 35.

application of domestic instruction in their own homes, to raise a generation of young men who would be better fed, stronger, and ready to serve their nation.[11] Theirs was a reproductive role: biological and social.

The bias present in girls' education at all levels, elementary through college, was welcomed and deemed necessary for the good of the British State. The majority of educationalists and average people agreed that the best education for a girl was one that fitted her to be a wife and a mother.[12] As such, the character of girls' education was inward looking, dealing with the private sphere of domesticity, and this bias only expanded for girls who pursued secondary education or college education to qualify as teachers. The authors of the Hadow Report argued that even if girls had been offered the same kinds of courses as boys with the same rigor, girls were less interested in their work, and were less successful because it had less to do with their home lives:

> This difference in attitude of the sexes may be partly due to the fact that the idea of a definite vocation is more clearly and consciously present in the mind of the average boy than to that of the ordinary girl…The fact that the boy is, as a rule, definitely conscious that he is expected to prepare, …for a definite avocation often gives a zest and stimulus to his school work which his sister may lack. It must be remembered that, to the majority of girls, the possibility of an early marriage is probably always present, …and this consideration may…tend to make them less ambitious and less interested in…subjects [not] of use in ordinary life.[13]

The whole curriculum and attitude toward education in Britain was based on the fact that all boys had to work and had to have some particular job or skill to provide for their families, while girls were considered a hindrance to full male employment, and were expected to abandon any work

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[11] Stephen Heathorn, *For Home, Country, and Race: Constructing Englishness in the Elementary School, 1880 – 1914* (Toronto: University of Toronto Press, 2000).
[12] L. D. Harvey, "The Education of the Girl: The Necessity of Fitting her Education to her Life," Bulletin of the Wisconsin State Board of Industrial Education, No. 4. (Madison, WI: Wisconsin State Board of Industrial Education, 1912).
[13] Hadow, *Differentiation of the Curriculum for Boys and Girls,* 114.

upon marriage.[14] What educationalists failed to consider was that because there was a bias, most girls were not exposed to history, math, science, or the workings of the broader world in the same way and to the same depth as boys. Their perceived lack of interest in other, "male" subjects may only be due to lack of opportunity and exposure in an educational system that did not think it proper to overly educate girls and women. Instead, state-aided education, spurred by the concerns of local education authorities (LEAs), gradually made domestic subjects compulsory for all girls, beginning with needlework, and culminating in housecraft or housewifery at age 13-14.[15] Another central aspect of the bias toward teaching domestic subjects to girls was that no one considered what an alternative education for girls, working-class in particular, would look like. Working women met with hostility in the workplace from men such as Samuel Smith and his father,[16] (see Chapter 3) but the reality that women needed to work to supplement their father's or husband's incomes was ignored. Most still believed it was of no use to educate a woman in the same manner as a man because her working life was limited by her biological and social function as mother. Educationalists considered it malpractice for a woman to ignore her duty, and for this reason, the British State codified gendered bias in girls' education for its own ends.

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[14] J.F. Mills, "Industry or the Home. Which is Woman's Sphere?" *Labour Leader*, March 12, 1909. Microfilm. Papers of Trades Union Congress. Women workers. London Metropolitan University Archives. (Hereafter, MET). Women workers. This article reproduces statistics which show more female workers in textile trades in 1909 and growing in proportion to men.

[15] "The Teaching of Domestic Science in Public Elementary Schools." Papers of the National Union of Women Teachers. UWT/D/28/17 Stack 8. Institute of Education, University College London, Newsam Library and Archives. (Hereafter, Newsam).
By statute, only needlework was compulsory for girls in elementary schools, but by fiat and de facto rulings by LEAs, in most schools in Britain, girls were required to begin a course of housewifery by age 12. Secondary schools varied more than elementary schools, and many were strictly academic with fine embroidery taught. Other secondary schools had special courses in housewifery alone where those were the only subjects taught. On measure, secondary schools had less domestic subjects' emphasis than elementary schools until the 1930s as more jobs opened up to women in institutional management as opposed to only teaching domestic subjects.

[16] Samuel Smith, "Bosley Cloud, A North Country Childhood." 3-168. Burnett.

Domestic subjects' instruction was actually the least established and least respected series of courses in the curriculum between 1902 and 1944. As discussed in the previous chapter, many educationalists were dubious regarding the scientific nature of teaching when domestic subjects were termed domestic science rather than housecraft. Given the contentious nature of domestic subjects and whether or not they were particularly scientific in character, this left much room for criticism that affected the reception of the subject in secondary schools and in colleges as a matriculation subject on par with chemistry or physics. In no small part due to the work of organizations such as the National Council for Domestic Subjects (NCDS) and the Association of Teachers of Domestic Subjects (ATDS), by the outset of WWII, domestic instruction had found some legitimacy as a school leaving subject and as a matriculation exam to colleges where female students could pursue more formal training in certificate programs for the various branches of the curriculum. In 1947, NCDS member Miss West stated that domestic subjects' instruction for all girls had a single goal:

> the ultimate aim of education is to fit each for her place in society; but since a high percentage of girls marry, and every woman must be prepared to be called on at some time or another to take charge of a household in the case of illness or accident, we must put the preparation of girls to be good wives fairly high on the list, and this presumably means being a fit companion for her husband, a good mother, and a first class housekeeper.[17]

The reach of domestic subjects was firmly entrenched in the conception that girls would become wives with families, and no attempt to disentangle gender from the curriculum would occur.

Though some independent-minded teachers tried to align the girls' curriculum with the boys', as Emily Davies, Frances Buss or Dorothea Beale, pioneers of women's education in the 1850s had attempted, the gendered bias in girls' education persisted even after WWII.[18] In 1947,

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[17] Miss D. R. West, M.A. "The Re-Orientation of Girls' Education from 16-18 Years of Age," Address, *National Council for Domestic Studies*, Twenty-Eighth Annual Report, 1947, 10. ED 276/2. TNA.
[18] Hadow, *Differentiation of the Curriculum for Boys and Girls,* 21-34.

for Miss West, the aim for the education of girls was the same as it had been in the 1850s despite innovations by Buss and Beale. Education in the postwar era followed in the same lines as the 1895 report of the Royal Commission on Secondary Education, in which education for the "industrial or working-class child was predicated on practical utility [being] paramount: the girl is to be trained for domestic duties, as the boy is trained for some definite calling."[19] To this end, many dozens of capable teachers, headmistresses, and educationalists who saw the social and moral value of training a girl for her natural role in the home, promoted the growth of domestic subjects' instruction. Theirs is a story of trial and error in seeking legitimacy for domestic subjects by allying it to varying degrees with science teaching in chemistry, physics, biology, and physiology. The ultimate outcome of domestic instruction, however, was tied to social forces beyond their control. Though the domestic subjects' curriculum began with a more scientific basis, the impact of WWI and the reintegration of servicemen back into society in the 1920s demanded a new emphasis on practicality since women were required return to the home after undertaking war work.[20] The social expectation, as Dierdre Beddoe has argued, was that women would return home to motherhood.[21]

Early Domestic Subjects' Instruction

In the early days of domestic subjects' instruction, in the late 1890s and early 1900s, the leaders in curriculum development and teaching were post-secondary fee charging institutions, largely falling under the Girls' Public Day School Trust.[22] At this time, the type of education was

[19] Ibid., 37.
[20] See Joanna Bourke, *Working-Class Cultures in Britain, 1890-1960* (London: Routledge, 1994).; Nicoletta Gullace, *The Blood of Our Sons* (Houndmills, UK: Palgrave Macmillan, 2002); Susan Kingsley Kent, *Gender and Power in Britain, 1640-1990* (London: Routledge, 1999).
[21] Dierdre Beddoe, *Women Between The Wars, 1918-1939: Back Home To Duty* (London: Pandora, 1989).
[22] For Example, Clapham High School For Girls syllabi, Streatham Hill High School Syllabi, Blackheath High School Syllabi, Papers of the Girls' Public Day School Trust, GDS/18/2/1; GDS/12/3/1. Newsam.

more technical and vocational in nature. In part, this was due to the types of grants such schools could obtain which fell under Technical instruction.[23] Accordingly, these courses could take a more scientific bent to keep such funding from the Board of Education.[24] Students were either young wives, intent on learning more about cookery or laundry, or girls intending to become domestic subjects' teachers.[25] Working-class girls were almost never students in these early fee paying training facilities.

The Clapham High School for Girls was among the premiere schools that offered post-secondary instruction by certificate programs which ran for three years, or one-year external courses for young women who wanted to take a simple course in cookery, laundry, or housewifery. In its catalogue of courses during the early 1900s, the curriculum for housewifery instruction for future teachers was:

> arranged on a broad scientific basis so that the training may not only equip intending teachers with the necessary skill and practice in the craft side of their subject, but to enable them to grasp the principles underlying efficient and successful Domestic work and teaching. Throughout the course of training the Sciences and the Domestic subjects are studied in relation to each other, and both in the solution of practical problems and in the students' teaching practice such knowledge of Science…is presupposed.[26]

This rationale reveals the dichotomy of teaching and instruction in domestic subjects, especially regarding middle-class students. For these students, who were at least 18 years old, domestic instruction was as much about the art and craft of homemaking which dealt with aesthetics, as it was about the scientific underpinning for why subjects should be taught in a certain way and why household tasks should be performed with an eye toward efficiency and hygienic principles.

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[23] Letter by E Woodhouse of Clapham High School for Girls regarding request for technical grant to fit domestic science labs. June 22, 1910. Papers of the Girls' Day School Trust, GDS/18/2/1. Newsam.
[24] Copy of Report of H.M. Inspector, Blackheath High School, 1906-1907. Papers of the Girls' Public Day School Trust, GDS/12/3/1. Newsam.
[25] Report of H.M. Inspectors of Norwich Day Technical Classes, 31 July 1912. Papers of the Girls' Public Day School Trust GDS/10/1/1/19. Newsam.
[26] Prospectus, Clapham High School for Girls, Department for the Training of Teachers of Housecraft, 3. Papers of the Girls' Public Day School Trust. GDS/18/2/1. Newsam.

These girls were taught both the practical how-to of performing household tasks and care and maintenance of household goods, and also the scientific theory surrounding each task and action. They were taught not only how to clean but why, through lessons on bacteria and germ theory, and how to prevent child illness and to improve child mortality rates.[27] This knowledge was essential for the students who wanted to become teachers in secondary schools.

Of all the school curricula offered, the earliest syllabi from 1900-1913 offer the most thorough instruction in physical sciences in closest connection to the syllabi of boys' schools like that of Bolton Senior Boys School (See Chapter 3). The curriculum of Clapham High School for Girls post-secondary housewifery certificates included:[28]

> Simple Housewifery: Sanitary Care of the house including chemistry and cleaning of the household furniture and utensils, and the method employed in daily and periodical cleaning of rooms.
> Laundry Work: The choice, price, and care of laundry utensils; the removal of stains. Treatment of loose and fast dyes. Bleaching and disinfecting. The different methods of washing and finishing various garments and fabrics. Application of science to above processes.
> Cookery: Care and management of various stoves. Choice and price of utensils and food ingredients. The preparation of assorted dishes for every meal. Preservation of food, jam making, pickling, bottling fruit. The application of science to the above processes. Simple bacteriology as applied to the household.
> Household Management: Evolution of the house, site, outlook, style in relation to surroundings. House planning and furnishing, lighting, decoration. Household organization and expenditure, division of incomes, management of larder, store and linens. Household accounts and business. First Aid, home nursing, care of infants.
> Needlework: Kinds of materials, their hygienic value, average prices and widths. Embroidery. Garment pattern making, patching, darning, knitting. Simple dressmaking.
> Upholstery: Renovation of household linen. Upholstering chairs. Curtains, roller blinds. (See science curricula in Appendix)

This curriculum offered for post-secondary domestic subjects' instruction for a certificate in housewifery did attempt to align scientific principles with domestic tasks.

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[27] Ibid., 5.
[28] Ibid. 6-8.

The rigor of the course in applied physical science and physiology/biology, however, was far less than in boys' courses. But compared to what science education a working-class girl in elementary school might receive, the Clapham syllabus was by far quite advanced, and was intended to allow girls to qualify as secondary domestic subjects' teachers. Mathematics was applied to household budgets and for planning purchases of rugs or fabric for furniture upholstery, or to determine how much of an ingredient was needed in a recipe. The use of scientific terms and concepts did elevate the tone of the work to give it a professional quality, and gave domestic work legitimacy as a co-equal subject of instruction at every level of British education. Much as Foucault argued in *The History of Sexuality*, the discourses of practitioners of science legitimated specialist knowledge and supplanted female folk knowledge in broader society as the authoritative school of thought.[29] Here, female educators adopted science and scientific terminology to elevate the status of domestic work from drudgery to craft and showed that domestic work required intellect and skill to do well. In this regard, the advocacy and promotion of science into girls' curricula was carried out by upper and middle-class women who demonstrated what was possible for the common housewife to achieve, and these classed standards were presented to the working-poor as the standard to emulate in their own homes. However, equality of opportunity did not exist for working-class girls in their curriculum. Class was the single biggest predictor of whether or not a girl would get a secondary education. Statistics from the thirties reveal, even then, that 1-2% of working-class girls were ever able to gain a secondary education, to matriculate to enter a program like at Clapham, and to train to be

[29] Michel Foucault, *The History of Sexuality, Vol. I: An Introduction* (New York: Vintage Books, 1990).; Lisa Forman Cody, *Birthing the Nation: Sex, Science, and the Conceptions of Eighteenth-Century Britons* (Oxford: Oxford University Press, 2005).

teachers.[30] For those girls, practical instruction tied to daily experiences colored by class concerns was what they were taught. If there was science in their curriculum, it was very basic, and very little of the content of physics or chemistry was carried into the work of elementary school curricula in domestic instruction.

A syllabus for the Cardiff, Wales Girls' School provides an example of the attenuated work of an elementary girls' school domestic science teaching. In this syllabus, training from Form IV to Form VII were listed with accompanying topics that were covered from age 11 to 14. There was some scientific character, but far less detail than would have been taught to elementary school girls. The syllabus, reproduced in the original form (See Appendix), is rather a mish-mash of subjects to be taught that centered mostly on care of the home and the family. Physics principles included a discussion of air and ventilation, and the properties of water were listed. Chemistry was taught in the composition of milk and in the purpose of food. Biology was taught through basic physiology in discussing illness, the human body, digestion, and care of babies. First aid was more practical and less about hygienic principles based in science. This syllabus read more like a guide for what young mothers should to expect rather than a systematic instruction in laundry, cookery, housewifery, and needlework. This education would fit young women to the struggles they would face in their homes in mining villages or on small farms. It was not intended to be academic, but rather, practical and informative. The character of this course was much more vocational than the training intending teachers received at Clapham.

Another example of an elementary domestic science syllabus was from Beckton Road Girls' School in Canning Town, London. This syllabus followed a similar plan in focus on the

[30] J. L. Gray and Pearl Moshinsky, *Ability and Educational Opportunity in Relation to Parental Occupation* (London: Le Play House Press, 1935). Papers of the Trades Union Congress, LA632-UK General Education 1930-1938. MET.

basics of food and the human body and first aid, but was more moralistic than the Welsh example which only discussed the evils of poor foods or impoverished social conditions.

Domestic Science Syllabus, Beckton Road Girls' School

General Aims:

- To teach the general principle of healthy living by simple knowledge of the structure and functions of the body.
- To give simple rules for home management.
- To give instruction on the evils of intemperance.

Standard VII:

> Health:
> a). Thrift. Preparation for old age and future needs. Post Office Savings Bank. National Savings Certificate. Co-operative Societies. Health Insurance Act.
> b). Simple lessons on first aid. Treatment of cuts and bruises, burns and scalds. Stings and bites. Simple bandaging. Care of broken bones, the use of splints.
> c). Simple lessons in Home Nursing. Qualifications of a good nurse. Care of sick room. Care of patient – making beds and changing sheets. Poultices and formentations. Care of the Convalescent. Infection and infectious diseases.
>
> Food and Drink: The misuse and abuse of alcohol. Alcoholic excesses likely to be injurious. Facts revealed by mortality tables, by life societies and friendly societies. Prevention of evils arising from alcoholic excess.[31]

The Beckton Road Girls' School syllabus comes from a district of high poverty in suburban London. The course of training was basic but had a higher degree of organization and exposure to higher levels of scientific training. It was held at a domestic subjects' center located near the school. The course did build to the end goal of training in practical housewifery and mothercraft in the final year (See Appendix). Service to the ill or infirm was evident in this syllabus as well, which had to be managed in addition to the normal day-to-day tasks of keeping house. Less emphasis was placed on household finances than the Welsh example, and instead the moral quality of thrift was stressed.

[31] Domestic Science Syllabus, Beckton Road Girls' School, Canning Town, n.d. Papers of the National Union for Women Teachers, UWT/D/28/17, Stack 12. Newsam.

Thrift and the preoccupation with the demon drink were holdovers from the mid and late Victorian era. In the 1850s when social science sought to improve the conditions of the laboring poor and the destitute, outdoor relief from parish churches or other charitable organizations was discontinued. Instead, the poor were encouraged to practice thrift which include finding work, making do with little, and ending the use of wages for beer or gin, and applying full wages to the household. With moral practice, the poor could elevate their own status economically.[32] Then they would not need to fear the workhouse or use the services like the Charity Organization Society, which provided aid to deserving poor by application and means test. Thrift, as Samuel Smiles envisioned it, did not translate to an eradication of poverty by effect of moral growth and the assumption of middle-class notions of respectability. [33] The issues workers faced in laissez-faire capitalism meant that changes in supply and demand affected the availability of work, and that the advance of technology altered how labor operated and eliminated old skilled trades like the Spitalfields Silk Weavers in the East End of London.[34] That thrift was still promoted in the 20th century is evidence that the middle-class view of social respectability retained its hegemony over the children of the working poor.

Thrift or economizing in the home, was of course a good idea, but the working-classes did not have excess money laying around to buy books or other luxuries that middle-class families could afford.[35] Thrift was a concept better applied to the middle-class due to their

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[32] Gertrude Himmelfarb, *Poverty and Compassion: The Moral Imagination of the Late Victorians* (New York: Vintage Books, 1991).; Himmelfarb, *The Idea of Poverty: England in the Early Industrial Age* (New York: Alfred A. Knopf, 1984).; Lynn Hollen Lees, *The Solidarities of Strangers: The English Poor Laws and the People, 1700-1948*(Cambridge: Cambridge University Press, 1998).; Ross McKibbin, *Ideologies of Class: Social Relations in Britain 1880-1950* (Oxford: Oxford University Press, 1990).; Gareth Stedman Jones, *Outcast London: A Study in the Relationship between Classes in Victorian Society* (Oxford: Oxford University Press, 1971).; Sarah Wise, *The Blackest Streets: The Life and Death of a Victorian Slum* (London: The Bodley Head, 2008).

[33] Samuel Smiles, *Thrift.* (London: J. Murray, 1875).; Samuel Smiles, *Self-Help: With Illustrations of Conduct and Perseverance* (London: J. Murray, 1875).

[34] Wise, *The Blackest Streets.*

[35] Kathleen Betterton, "White Pinnies, Black Aprons," 2-71a., 5, 33. Burnett.

conspicuous consumption of ornaments for the home. But in terms of moral imperative, the middle-class attributed their rise in wealth and status due to industry, sobriety, and Christian faith. That people remained poor was an indicator that they must remain immoral and undisciplined—spiritually and socially. The problem of alcohol was the key indication for the middle-class that the working-class were immoral. Excess drinking was a problem for many working-class men and women. Several working-class people wrote accounts of their alcoholic fathers in their autobiographies of this era.[36] Middle-class educationalists decried the time fathers spent in pubs taking a pint after work when their time and money might be better invested in the home and in elevating the status of their families. In the 1880s and the 1890s, much legislation passed that regulated or closed down establishments like gin palaces.[37] The taxes on gin were used to fund education grants. Far fewer working-class men could afford gin, so ale was the standard beverage, and was far less alcoholic than gin. In the early 1900s, the working-classes were far more temperate than they had been in a half century. For girls in London, however, thrift and temperance were the main features of an otherwise normal course in domestic science. This alliance shows how an applied science course to serve a moral purpose in promoting notions of the ideal citizen in the minds of young girls.

After the war began in 1914, and particularly after the realization that it would not be brief, the Department of Education, in 1915, issued Circular 915, "Teaching of Thrift in Public Elementary Schools." This circular corresponded to state directives to ration key foodstuffs either due to blockade, and German attack, or due to the provision of food for the soldiers at the

[36] Robert Roberts, *The Classic Slum: Salford Life in the First Quarter of the Century*. (Manchester: Manchester University Press, 1971).; May Owen, "Autobiographical Letter," 2-576. Burnett.
[37] McKibbin, *Ideologies of Class*.

front. Now thrift carried a military and civic imperative that surpassed personal morality but built upon this virtue as a form of citizenship even school-girls could practice. The Board wrote

> increased thrift on the part of every class in the community is essential to the national welfare not merely during the continuance of the War but after its close. By helping to develop habits of thrift among the children who will in a few years undertake the responsibilities of citizenship and by training them in the exercise of the self-denial and foresight which thrift involves, Public elementary schools can render a national service of great value[38]

When teaching savings was paired with Circular 917, "Economy in Food: Some Suggestions for Simple and Nourishing Meals for the Home," it is clear that teachers of domestic subjects had the task of educating girls on cooking with less out of a duty to the nation.[39]

As with the science curriculum, it was up to the LEAs to determine what form their domestic science courses took based on local conditions and concerns both during war and after. In the above syllabi alone, it is possible to note what was important at fee charging, post-secondary institutions prior to the war, and in elementary schools. Secondary schools either fell in line with the Clapham syllabus which was taught with a scientific bias, or there was very little domestic science taught at all. Parents of many middle-class girls did not want to pay to educate their daughters in domestic toils such as laundry or cookery. There were servants for that sort of labor. In an internal memo from 1907, the Council of the Girls' Public Day School Trust set forth guidance on domestic subjects' instruction. Under the Cookery section, the council made the following observation:

> Cookery is unsuitable as a subject in the High School Course for girls under the age of 17, for the following reason: The girls who attend the Schools are dawn from the class that habitually employs servants. It is unnecessary and undesirable, therefore, for young girls to work in the kitchen at home; hence their Cookery at School would have no

[38] Circular 915, "Teaching of Thrift in Public Elementary Schools," July 1915. ED 142/44. TNA
[39] Circular 917, "Economy in Food: Some Suggestions for Simple and Nourishing Meals for the Home," July 1915, ED 142/44. TNA.

> practical bearing, and if taught some time before they leave School would be forgotten by the time they might fittingly practice the art at home.[40]

Yet, for the working-class girl, the Hadow Report emphasized that "practical utility [being] paramount: the girl was to be trained for domestic duties."[41]

Biased Practical Instruction for the Working-Class

The character of domestic science education varied not only by school level, but also by the social class of the pupil. Middle-class girls were not educated to be domestic drudges, but to be wives intent on creating the aesthetic ideal in her future home. Working-class girls were expected to work exclusively in the home and perform all work and care of the family or else they were considered a moral failure, and a liability to the nation. One curriculum was educative, and the other was vocational, considering that girls with only an elementary education could not hope to have many options apart from marriage or going into domestic service in the households of their middle-class peers. [42]

Evidence of the vocational nature of working-class girls' domestic science instruction appears in reports of His Majesty's Inspectors of schools, teacher unions, and societies that promoted domestic science instruction as well as in the autobiographies of women who were educated in this bifurcated system. As mentioned in the previous chapter, science instruction required purpose-built labs with a range of equipment and apparatus. The same was true for domestic science. But town councils and LEAs were not keen to renovate every girls' school to provide a furnished flat or a home for girls to take housewifery courses, or to provide large

[40] Memo on Domestic Science, 1907. Papers of the Girls' Public Day School Trust, GDS/17/7/2. Newsam.; Margaret Cunningham, "End of Exploring," 4-124. Burnett.
[41] William Henry Hadow, *Board of Education Report to the Consultative Committee on Differentiation of the Curriculum for Boys and Girls Respectively in Secondary Schools* (London. H.M. Stationery Office, 1923), 37.
[42] May Owen, Autobiographical Letter, 2-576. Burnett.; D.M. Ponton, Autobiographical Letter, 2-629. Burnett.

kitchens and laundry facilities in each school.[43] In many instances, a domestic subjects center was built which had the proper space, equipment, and apparatus to allow girls to learn laundry, cookery, and housewifery.[44] A number of schools shared the center, each rotating a day or half-day, or six-week period of use during the school year. Girls usually had to walk to these facilities to take their domestic instruction. A part of their instruction was cookery. In particularly poor areas, after legislation was passed stating that school meals should be provided for needy children, domestic science teachers enlisted the labor of their students to prepare daily meals for their peers. This might take up half of their school day in preparing the meal and cleaning up after it was served. It was regular practice into the 1920s for working-class girls in the upper forms of elementary schools to perform this labor on days when they attended the domestic subjects center. The Nation Union of Women Teachers (NUWT) composed a memo that criticized the practice of requiring girls to prepare meals. The memo stated that:

> Pressure placed upon teachers of cookery to sell food cooked by the children, is a grave impediment to the making of an orderly, progressive syllabus of instruction, and where a daily meal has to be prepared, the children's lessons are reduced to routine.[45]

The state objective to provide school meals was in fact an impediment to good teaching in cookery. In 1920, the NUWT described the situation as "uneducational" and that the food prepared by young students might not meet the standards for nutrition that were required for malnourished children. The union emphasized that this arrangement did not leave "teachers time to teach, nor the children the opportunity to learn," since the teacher could not allow food to be spoiled by the inexpert efforts of her students. Instead of teaching a valuable lesson, the lesson

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[43] "Memo on Teaching Domestic Science in Elementary Schools," 3. Papers of the National Union of Women Teachers, UWT/D/28/17, Stack 8. Newsam.
[44] Dorothy Barton, Letter to Lesley Longley, Papers of Lesley Longley, LL/1/2 (0875) Newsam; Eva Shilton, "School and Family Life in Coventry" 2-706. Burnett.
[45] "Memo on Teaching Domestic Science in Elementary Schools," 3-4.

was "mechanical and monotonous" like the peeling of 30 pounds of potatoes for a meal. Furthermore, "girls could not learn from their mistakes," and were worked far too hard at such a task, rather than hiring out a staff of trained workers to prepare the meals. In terms of hygiene, the domestic subjects' centers could not be adequately ventilated to ensure the health of the student cooks, and that the whole place became too dirty to assure safe food for the needy children to eat, in addition to a lack of cold storage for ingredients.[46]

In 1931, the Union, again made plain their continued criticism of this practice of using girls' labor during school rather than teaching them:

> The tendency in some areas to regard the domestic science room or center as the proper place to which to look for a solution of the problem of providing midday meals for necessitous children…, is also to be deplored. Such a requirement is bound to place a grave hindrance in the way of carrying out properly devised courses in housecraft…it is clear that the educational function of the domestic science room or center must be the main consideration and we strongly deprecate any tendency to regard provision of meals as the function of the domestic science teacher.[47]

Further, the Union was critical of the undue emphasis of working-class girls on domestic work if other courses in the school curriculum were also aligned to the goal that a woman's place was in the home.

> Thus a girl's whole education is coloured with the idea that her only concern is with the home and domestic duties…It appears, in very many cases, girls are not taught domestic science, but are given domestic training and much time is given to practicing processes such as potato peeling, scrubbing, ironing, washing-up, etc., so that, instead of being given a broad education, these children are being trained as efficient young workers…The National Union of Women Teachers objects to the assumption that all girls must learn to scrub, to clean, to wash-up, etc., but no boy will ever be faced with such tasks. Even if a majority of girls eventually become home-makers, it is not right that so much of this training should be given exclusively to girls during their school careers.[48]

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[46] Preparation and Serving of meals for necessitous children in Domestic Economy Centers. December 1920. Papers of the National Union of Women Teachers, UWT/D/28/17, Stack 5. Newsam.
[47] A Memorandum on the Teaching of Housecraft, 1930, 4, Papers of the National Union of Women Teachers, UWT/D/27/18. Newsam.
[48] Memo on Teaching Domestic Science in Elementary Schools, 1-5. Papers of the National Union of Women Teachers, UWT/D/28/17, Stack 8. Newsam.

The NUWT was very forthright in their criticism of cookery being turned into labor rather than remaining an educational course in a series of subjects which emphasized housewifery. It taught drudgery rather than pride and purpose, which was the point of educating girls for citizenship.

What is evident from this series of memos on making domestic science a vocational rather than educative subject is that the NUWT made their most strenuous appeals on behalf of working-class girls not to have their education spent in this way, if indeed, it was to end at 14 years old. It appears that LEAs and councils had no problem using working-class girls as a free labor supply to comply with the law to provide school dinners to needy students, and also to provide domestic subjects' instruction to girls which was their prerogative to insist upon in making the course compulsory. In this way, LEAs cut out the middle-man, and reduced costs by not employing a dedicated staff of girls who had left-school to provide meals for other children. It seemed to be a most economical and desirous accommodation of Authority and Council goals and Board of Education laws and guidance. Further, the NUWT criticisms hit on the exact point of curriculum differentiation based on gender. Under the system of state-aided education, boys would have never been expected to work, without wages, during school hours to provide basic needs to other students. Additionally, boys were not expected to pay for the privilege of providing their own materials in their science courses as girls were for their domestic science courses. The NUWT wanted to know why it was justifiable that a girl should be treated in this way, if she was meant to receive an equal education to a boy.[49]

Nonetheless, it was the working-class girl who suffered. Her education was spent being exploited for her labor to complete these daily objectives of the LEAs, and their sense was that these girls should have been grateful for even the opportunity of being educated and having

[49] Ibid.

access to domestic training centers in the first place.[50] For LEAs, this was the best they could provide working-class girls who received elementary education. Much time and expense went in to building these centers across the country. Why should girls not do their bit to return the favor? In an article on the technical education of women in London, from 1903, the Woman's Industrial Council discuss the attitudes of the artisan classes and the factory class towards the provision of continuation courses in housecraft and other practical subjects:

> The fine classroom, the generous equipment, the bright surroundings, the busy hands and intent faces of the students, the air of briskness that pervades the classes is most inspiring. The instructress will tell you of the benefit the students have derived. She will tell you that some of her students are drawn from factories, girls who are about to be married, and having passed from school to factory, have had no leisure and no opportunity to learn housewifery…The instruction is carefully suited to an artisan's household; the cooking is of the plainest ingredients, and the menus are most simple; the dressmaking of inexpensive materials; the students wash and iron their own clothes at the laundry; everything is planned with strict regard to economy and practical life…Yet, shocking though it must be to the advocates of self-help among the leisured classes, girls of the factory class will not in any numbers attend classes at the end of a day's work to learn a little more of a trade which they have been working eight, nine, or ten hours a day. Neither will they pay a fee to continue learning a trade which their employers pay them a few shillings a week to learn. They are ungrateful enough not to care about filling the gaps in their knowledge at the expense of their little leisure, neither do they care that they are ignorant of the principles of their trade.[51]

The middle-class impression that working-class girls were ungrateful or indignant at the provision they were offered demonstrates the divide that class imposed on them.

Furthermore, this classed bias that critiqued working-class girls who might not be able to continue their education after a full day at the factory, is one glimpse at the stratification of education and the Catch-22 of thrift. These girls were working but did not have training that the middle-class thought sufficient for homemaking. In consequence, girls did not want to take classes in addition to work or to pay the fees of several shillings to a pound or more per course.

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[50] Woman's Industrial Council, *Report on the Technical Training of Girls at Home and Abroad* (London: George Reynolds, Ltd., 1903), 26-27. Papers of the Trades Union Congress LC1567-2096, Education of Women. MET.
[51] Ibid.

If the system had educated working-girls for more than utilitarian ends, maybe the result in their preparation for home life might have been improved, but the middle-class observer cast blame upon the working girl for failing to spend money she may not have had to attend a course to better herself by middle-class standards. When educationalists discussed thrift and self-help, they set a trap for working-class girls. The LEAs could claim they did all they could to offer education to the masses, while making the failure to continue education a mark of defective character rather than a situation defined by structural inequality in which the working-class girl knew she could not compete, so she did not bother. Her immediate concern would have been helping support her parent's household and her younger siblings by contributing her wages to their welfare, not in attending night classes.

In the end, this exchange reveals the extent to which British state-aided education discriminated not only based on gender, but on class as well. A middle-class or elite boy would get the best possible education, including science instruction. The working-class boy would get a competent standard of teaching in science and mathematics. The middle-class girl who could go to training school to teach would get science education of a kind similar to the working-class boy, while the working-class girl got very little science training, and was expected to work during her instruction in domestic courses, and to provide her own materials at a cost to her family.[52] A working-class girl was expected to do more, including running a competent home based in concepts of thrift, without any parity in instruction to middle-class girls, or to girls who got a secondary education. The NUWT sensed something was wrong if the democratic ideal of

[52] Summary of Questionnaire responses on Teaching of Domestic Subjects, 4. Papers of the National Union of Women Teachers, Education Committee, UWT/D/28/17 Stack 9. Newsam.; Report of the Joint Conference on Teaching of Domestic Subjects, National Union of Women Teachers, 1924, 0485. Papers of the National Union of Women Teachers, UWT/D/28/17 Stack 14. Newsam.

education for all after 1902 was showing its cracks and faults so clearly in unequal provision of educational opportunity for working-class girls.

Professionalizing Domestic Subjects' Instruction

It was apparent to domestic subjects' teachers and educationalists that more had to be done to improve the character and content of domestic instruction across Britain. The NUWT and the National Council for Domestic Studies (NCDS) led the way in building a better reputation for domestic courses that removed the vocational aspect of drudgery and exploitation that working-class girls had endured, thus making instruction less esoteric and abstractly scientific. The movement between 1914 and 1939 was towards the inclusion of domestic subjects in the curriculum for girls, especially at the secondary level.[53] It sought to reorganize domestic instruction in the individual schools by investing in building domestic science rooms on site rather than use the local domestic training center.[54] Proponents felt that if domestic science was not removed from the rhythms of the school and its academic subjects by its location in off-site centers, there would be a better chance that domestic subjects would be taught at the secondary level. The goal of domestic science proponents was the hope that these courses would be taught in the same building, allowing each academic subject area to contribute to lessons that aligned with domestic subjects. Therefore, a girl would not be made to pursue only a domestic life. Her instruction would be more relatable and practical to the real world concerns she would face upon leaving school.

[53] Resolutions passed by The National Council of Women, October 1924. Resolution 10. Papers of the National Union of Women Teachers, UWT/D/28/17, Stack 7. Newsam.
[54] Report of the Joint Conference on Teaching of Domestic Subjects, National Union of Women Teachers, 1924, 0482-0483. Newsam.

To begin this work, the National Council for Domestic Studies formed as a pressure group that would advocate for the recognition of domestic subjects as co-equal in the secondary curriculum, and as an exam subject for entry into college and university training. Founded in 1917 after the examining body called the National Union for the Technical Education of Women in Domestic Subjects was reorganized, the NCDS took over the role of advocating for an expansion of exams that would be accepted for girls intending to become teachers, or to attend university.[55] During the height of the war, the Board of Education had curtailed examinations for entry into colleges and training schools by ending the first exams at age 15, and only offering the second set of exams at 18-19. The majority of these exams were for young men who were intending to pursue science, and they were kept from conscription so that they could attend college and contribute to the war effort.[56] Subsequently, if any progress were to be made in promoting domestic subjects' exams, it would have to be done privately, at a grassroots level, and would need to demonstrate by the success of exam takers, the suitability of domestic subjects as recognized college level course or certificate program. The NCDS' mission was only tangentially related to the Board of Education's war time stance that girls be educated to care for families on less due to rationing.

In the first two years of existence, the Examinations sub-committee sought to elevate the standard of instruction required for girls to be awarded certificates in Housecraft, Housekeeping, and Cookery. Their work included drafting syllabi for distribution among secondary schools to adopt for their domestic subjects' courses if their students desired sitting for exams. At the time,

[55] First Annual Report, National Council for Domestic Studies, 1919. Pg 5. ED 276/1. TNA.
[56] Circulars 931 and 952 discuss allowing boys pursing science to be exempt from conscription as far as possible as the State needed all the scientists it could get to fight the war. Circular 921 discusses the alterations to science exams. ED 142/44, 45. TNA.

the number of certificates awarded was modest. Table 13 below provides information on the slow growth of diploma recipients. [57]

Table 13: NCDS Certificate Statistics

Subject	Number of Candidates	
	1917-1918	1918-1919
Housecraft Certificate	55	76
Cook's Certificate	--	4
Needlework Diploma	31	18
Dressmaking Diploma	8	13
Millinery Diploma	8	12
Total:	102	123

In 1919, a diploma course examination cost £3 3s. 0d. per 6 hours for practical exam, and 7s. per student for a theoretical or written exam.[58] A £3+ exam was a steep price even in 1919, especially considering that training schools like Clapham Girl's High School charged over £14 per term for a three year course by this time.[59] Based on finances alone, the students who would have taken these exams were certainly middle-class. Nonetheless, the NCDS had begun to accomplish its three stated aims:

1. To bring together representatives of all classes of persons interested in Domestic Studies.
2. By such association to bring influence to bear upon the State, upon Educational Authorities, to promote wider study and teaching of Domestic Subjects and the increased recognition of these studies in the School curriculum and as an essential part of the training of women.
3. To undertake such examination work as may seem from time to time expedient.

At the third meeting in 1921, Council records indicated that 83 students sat for the housecraft exam from eleven institutions, three of which put forward candidates for the first time. In cookery, three schools recommended 26 girls for certificates.[60] In 1922, the Council felt that the

[57] First Annual Report, National Council for Domestic Studies, 1919, 9. ED 276/1. TNA.
[58] Ibid.
[59] Prospectus, Clapham High School for Girls, Department for the Training of Teachers of Housecraft, 5. Papers of the Girls' Public Day School Trust. GDS/18/2/1. Newsam.
[60] Third Annual Report, National Council for Domestic Studies, 1921, 5. ED 276/1. TNA.

best way to raise the profile of domestic subjects and allied science instruction was for training colleges like Clapham to continue to innovate in their syllabi and turn out capable teachers for secondary domestic subjects' posts. In time, there would be enough trained teachers to build up programs of secondary schools where domestic science had yet taken hold as a co-equal subject.[61] Table 14 shows the growth in diplomas and certificates conferred and the expansion of subjects examined.[62]

Table 14: NCDS Examinations Sub-Committee Report, 1921-1922

Subject	Number of Schools presenting students	Number of schools presenting for first time	Number of diplomas awarded
Housecraft	11	2	90
Junior Housecraft (new exam)	2	2	17
Cookery	3	--	17
Teachers' Cert-Needlework	--	--	65
Teachers' Cert-Dressmaking	--	--	34
Teachers' Cert-Millinery	--	--	48
Total			271

The Council felt that given these numbers, "that the value of Domestic subjects was being increasingly recognized and the examinations helped to improve the syllabuses of instruction and encouraged the organizing of comprehensive courses in the Schools."[63]

In 1924, the Council printed the 1921 census data on girls in school in the country, and Board of Education statistics on the number of domestic subjects' courses in post-primary institutions. The data are as follows:

[61] Fourth Annual Report. National Council for Domestic Studies, 1922, 9. ED 276/1. TNA
[62] Ibid., 11-12.
[63] Ibid., 12.

Census Returns, 1921:
Girls between 12 and 14 years of age: 751,000
Girls between 16 and 21 years of age: 1,717,000

Board of Education Statistics, 1920-21:
Girls, 12-14 learning domestic subjects in Elementary and Central Schools: 497,450
Secondary schools known to be giving instruction in Domestic Subjects: 416
Secondary schools on the recognized list: 794
Number of girls taking Domestic Subjects in Junior Technical Schools: 160
Girls and women taking full or part-time Domestic Subjects in Day Technical Schools: 2140
Number training as teachers of Domestic Subjects: 854
Number taking courses at King's College: 70
Short courses taken in Technical schools – number of classes:
Cookery: 2188
Laundrywork: 139
Housewifery: 874[64]

These statistics reveal several key facts. The first being that the scheme of enhancing the visibility of the certificate and diploma programs in domestic subjects was working if domestic subjects were now being taught in over half of all secondary schools (416/794), when there had been a strictly academic bias in place in the early 1900s. Second, the data reveal the scope for expansion. A possible 2.5 million girls and women could be reached through domestic subjects' instruction. To reach them all would not only increase the credibility of domestic instruction but also make it a legitimate course of study suitable for college and university entrance. Third, we see the breakdown in the proportion of girls who at 12-14 are in elementary schools versus those in secondary schools. Of 751,000 girls of this age, 497,450 are in elementary schools, leaving 253,550 in secondary schools. The proportion of elementary to secondary is 2:1. This reflects the class bias noted above where middle-class girls were given a more academic and scientific course of instruction, whereas working-class girls received utilitarian practical instruction in the most labor-intensive domestic subjects of cookery and laundrywork. Approximately, 130,000 of

[64] Sixth Annual Report, National Council for Domestic Studies, 1924, 7. ED 276/1. TNA.

the secondary school girls would have been receiving domestic subjects' instruction in 1920 based on these statistics, a 3:1 difference from working-class girls. Also, of note is the expansion of continuation courses at Technical Schools to allow girls and women to supplement their primary education in domestic subjects. That almost 900 girls were training to become teachers reflects that demand was high, but that supply was rapidly catching up due to the efforts of the NCDS to raise the profile of domestic courses in the secondary curriculum.

In 1927, on the tenth anniversary of the founding of NCDS, the Council took time to summarize their growth and success over the past decade. "Dealing with only six schools in 1918, 32 schools now prepare their pupils for the various examinations whilst the number of candidates has more than trebled, 102 being entered in 1918 and 350 in 1926."[65] Table 15 provides the year-by-year data on the increase of pupils sitting domestic subjects' exams: [66]

Table 15: NCDS, A Decade of Exams

Exam Subject	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
	Number of Candidates entered each year									
Jr. Housecraft	--	--	--	--	17	13	24	44	74	70
Housecraft	55	60	65	83	99	87	105	150	180	185
Cookery	6	4	5	26	17	17	14	12	17	14
Cook's Cert	--	--	--	1	--	1	12	16	6	22
Glasgow	24	26	83	80	142	85	100	94	105	99
Number of schools taking the Council's Examinations										
	6	9	9	12	14	14	14	18	24	32

These data reflect the marked success of the work of the NCDS to raise the profile of domestic subjects' instruction at the secondary level. However, even this progress is modest, if one considers the 1920-21 statistics of recognized secondary schools (794) versus secondary schools teaching domestic subjects (416) in comparison to the mere 32 schools by 1927 that did work advanced enough for girls to become domestic subjects' teachers in the hundreds of secondary

[65] Ninth Annual Report, National Council for Domestic Studies, 1927, 4., ED 276/1. TNA
[66] Ibid., 7.

schools with a lower level of attainment in domestic instruction (≈762). Considering where the Council began, this is still dramatic in increase. The data also reflect the consistent increase in the number of girls taking the housecraft exams. It was the most popular of the subject exams and did contain the most scientific instruction of any series of subjects.

In the 1920s, the Council fought to dispel the notion that domestic subjects were better suited to the dull-witted girl of the elementary school. In 1923, Mrs. Wintringham, an M.P. and member of the NCDS wrote a piece for the Westminster Gazette that espoused the old view of domestic subjects fitting intellectually inferior girls for home life. She wrote that:

> One of the aims of the present system of education is to develop individuality in our boys and girls. Domestic teaching has distinctly furthered this—it makes each girl responsible for her own allotted work, thus inducing skill, competition, and great pride in achievement. It is especially valuable in developing children who are sometimes classed as 'dull' or 'backward.'…A backward child who has no talent for theoretical work-a fact that excludes her from the ordinary curriculum-can develop by means of domestic training in such a way that she can rank as a capable housewife.[67]

However, by 1929, citing the expansion of pupils taking domestic subjects' exams, member, Miss Lindsay recounted how the practice used to be sending the

> daughter of limited intelligence [into] the domestic sphere. People thought that neither training nor skill was necessary to safeguard the health of the family. This is now acknowledged to be one of the greatest fallacies of the past in regard to the home life of the nation. Domestic science is a profession calling for intelligence, efficiency and scientific application. Thinking people realize this, but to the many in the street it is still unfortunately necessary to emphasize the fact.[68]

The continued growth of the legitimacy of domestic subjects' exams designed by the NCDS, and the steady professionalization of domestic science as a viable career option in multiple allied fields did accomplish the goals of the Council to improve the reputation of domestic instruction. No longer was the subject tainted by association with domestic service, a profession that was

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[67] Mrs. Wintringham, M.P., "Why Domestic Subjects should be Taught in Schools," *Westminster Gazette*, April 11, 1923. Clipping found in the Papers of the National Union of Women Teachers, UWT/D/28/17 Stack 5. Newsam.
[68] Eleventh Annual Report, National Council for Domestic Studies, 1929, 12-13. ED 276/1. TNA

waning in the days before WWII, at many estates and in middle-class homes. Instead, domestic work was connected to intelligence, and was directed as a subject matter that was deemed natural for girls to undertake, thus, the educational establishment saw the expansion of domestic instruction as a positive in improving the quality of education for girls, while also preparing them for a future in the home. In fact, in 1933, 694 girls took exams in variants of housecraft and institutional housekeeping; 92 girls sat for exams in cookery or cook's certificate; 21 girls took an optional paper in Science allied with Housecraft. Nearly 800 girls sat exams from 58 schools, up from 102 girls in 1918 from 6 schools.[69] To close, data in Table 16 shows how domestic subjects stood in 1939 at the outset of WWII, in the last year of unrestricted supply of goods to use in domestic science teaching. In this year, 83 schools prepared pupils for the following exams: [70]

Table 16: NCDS Summary of Exams Jan. 1, 1939 - Dec. 31, 1939

Exam Subject	Number of Entrants
Preliminary Housecraft	206
Housecraft	638
Science Applied to Housecraft (optional)	13
Institutional Housekeeping	21
Cookery	82
Cookery Theory	43
Cook's Professional Certificate	49
Needlecraft	2
Needlework for Schoolgirls I	11
Needlework for Schoolgirls II	7
Rural Domestic Economy	7
Total:	1,079

The final data prior to WWII show domestic instruction at its apogee in breadth, diversity, and attainment in sheer numbers.

[69] Fifteenth Annual Report, National Council for Domestic Studies, 1933. ED 276/2. TNA.
[70] Twenty-First Annual Report. National Council for Domestic Studies, 1939. ED 276/2 TNA.

The National Council for Domestic Studies worked to professionalize and legitimate domestic instruction in secondary schools and in training colleges. It accomplished getting domestic subjects included in matriculation exams for middle-class girls to enter into training colleges, and it standardized the curriculum across the country by providing the most informed syllabi to train students for their diploma exams. Among middle-class girls who could afford the advanced post-secondary education necessary to sit these exams at 20 or 21 years of age, the efforts of the NCDS elevated the consistency and content of the course they were taught. There is evidence that the NCDS scaled down exams for school leavers in the Needlework for school girls' exams, but the test was new and only 18 girls took either exam. Preliminary Housewifery did better with 206 girls sitting. But the efforts of the NCDS were stalled somewhat by the exigencies of war, evacuation, and the movement of girls out of training programs and into service for the war effort. Girls with this training could work as nurses, hospital cooks, managers, and numerous other positions during the war. But the lingering question that these data do not address is what were conditions like for elementary girls taking domestic subjects in the late 1930s? Was their instruction less vocational and more scientific, or was it still practical and utilitarian in character? For these answers, we must return to the work of the National Union of Women Teachers.

Innovations in Elementary Domestic Instruction

Beginning around 1925, the situation for elementary level domestic instruction began to change. The NUWT were advocating, "the teaching of domestic subjects be re-organized so that instruction is no longer given in separate centers, but forms a part of the curriculum of each

individual school, as is usual in Secondary Schools."[71] Proponents of re-organization argued that it would be easier to set a timetable of instruction across the school if domestic subjects could be taught on-site, as with secondary schools, instead of having to share a local center with multiple schools and divvy up domestic course instruction between all schools. The timetable at centers was especially tight for girls 13-14 who got a concentrated six-week term there to learn housecraft before leaving school. But many felt the cost would be too great, especially in rural areas where there were fewer girls and less demand and no financial provision for equipped kitchens and flats on school property.

This move toward incorporating domestic subjects into the curriculum and into the physical space of each school was seen to be logical but impractical under the current system and the ways Councils and LEAs were willing to fund girls' domestic subjects' programs. In many ways, incorporation was at odds with the move to disassociate intensive science instruction from the practical work that working-class girls needed to master in order to run a home. By the mid-1920s, popular opinion had soured against a heavily scientific bias in domestic instruction in elementary schools. At the Joint Conference on Teaching Domestic Subjects in 1924, a member of the Association of Teachers of Domestic Studies, Miss Pycroft, articulated her objection to an emphasis on the "Science" of domestic studies at the expense of its status as a "craft." According to her notes on her statement, the Association did not want the work treated with scientific accuracy, though the scientific attitude was necessary. Miss Pycroft thought "the Board of Education would not accept the term 'Domestic Science,'… for the Board would be afraid that the practical work might be omitted. Ultimately, the term "Science of Homecraft" better met the

[71] Report of the Joint Conference on Teaching of Domestic Subjects, 1924, 1, (0482), Papers of the National Union of Women Teachers. UWT/D/28/1, Stack 14. Newsam.; A Memorandum on the Teaching of Housecraft, 1931, 3 (0700), Papers of the National Union for Women Teachers, UWT/D/27/18. Newsam.

case." [72] By 1931, the NUWT felt that girls should receive a progressive, four years' course in domestic subjects with the more in depth and scientific instruction of housecraft left to the final two years where the practical work of the previous years could be built into an understanding of more advanced work.[73]

Helen Sillitoe, an H.M. Inspector for domestic subjects, and member of the NCDS, wrote in a serial article in the journal "Housecraft," that many schools had overthrown the attempt to teach domestic subjects along a scientific bias. "It was generally found that such correlated schemes of work left pupils with very little time for the actual carrying out of complete processes of laundrywork, cookery, etc." she wrote. "The schemes met with much adverse criticism from some teachers of Housecraft and from many teachers of Science. The former complained that practical cookery was suffering from a too close alliance with the Science work."[74] Science teachers of the time believed that a scientific bias was good for domestic instruction, but they stated in a memo, which Sillitoe reproduced, that

> On the other-hand it is urged: --
> i.) That in practice Domestic Science courses do not provide so good a scientific training as science courses of the ordinary type because –
> a. They are concerned more or less in the interests of practical subjects which appear only in a partial degree to be capable of scientific treatment;
> b. They fail to provide in the Schools courses of instruction of progressive difficulty;
> c. They easily degenerate into simple observation work coupled with "useful information.[75]

In courses that sought to give a girl sound instruction in housecraft, Ms. Sillitoe averred, science did not factor into the matter.

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[72] Miss Pycroft, Comments during Conference, Report of the Joint Conference on Teaching of Domestic Subjects, National Union of Women Teachers, 1924, 3. Papers of the National Union of Women Teachers, UWT/D/28/17, Stack 14. Newsam.
[73] A Memorandum on the Teaching of Housecraft, 1931, 6.
[74] Helen Sillitoe, "A History of the Teaching of Domestic Subjects," *Housecraft* Vol. III No. 2, Feb 1930, 40. Papers of the Nation Union of Women Teachers, UWT/D/28/17, Stack 5. Newsam.
[75] Ibid., 40-41.

> No attempt is made in courses of this type to correlate the Housecraft with the Science teaching; in fact, in the most successful courses of this type care is taken to avoid the use of scientific terms…The strongest argument that has been met with, however, is that, with the limited time available in school for Housecraft instruction, and in the face of many difficulties which occur in the treatment of Domestic Science, there is a very considerable risk that to advocate the teaching of Housecraft on wider lines may only result in the loss of manipulative skill which the purely technical instruction can impart, without gaining any advantages in return. It has been noticed, however, and it is worth noting that there is much ground in common to those who advocate correlation and those whose view is frankly utilitarian.[76]

As an Inspector of Schools, Ms. Sillitoe was a master of spotting efficiency in schools across Britain. Early efforts to introduce broader domestic course offerings into elementary schools at the beginning of the twentieth century had been formative. Dead by the time her 1930 article appeared, Ms. Sillitoe's view was likely colored by her own views of turn of the century hygiene and the best uses for working-class girls' school time. While the NUWT did not support Ms. Sillitoe's view, many LEAs and Councils did. The class bias, and the realities of working-class life in the depressed economy of the 1920s meant that working-class girls needed more practical instruction for what offerings adult life likely held – a stint in the factory or shop, marriage, and family. These girls needed basic know-how in performing domestic tasks and hygiene, and for many, that was an adequate, if not superior education.

The proposed changes in domestic subjects' instruction had mixed results. The recommendation that domestic training centers be abolished was not carried out in any meaningful way at elementary schools. LEAs likely felt the scheme to be too expensive on rate payers to add to building costs by fitting out rooms in every school for domestic instruction. However, any question of inadequate provision for boys' science laboratories was met with more concerted efforts to address the deficit than any girls' science accommodation received. Given that elementary education was more utilitarian, especially in reference to domestic instruction,

[76] Ibid., 41-42.

the LEAs who determined the local curricula would want to maintain centers that provided pragmatic education, and practical training for real life. Only in secondary schools could advances be made in science provision in domestic subjects because there were special endowments, and the fees pupils paid to attend could be set to reorganizing domestic instruction at that level. In this way, class bias continued for girls' in domestic instruction, where one group was made to perform the labor for the sake of learning routines and processes, while the other was made to learn about why things were done in such a way with a scientific explanation.

However, the move away from intensive science instruction and toward a craft based, aesthetic sort of domestic instruction did prevail, especially in elementary schools during the 1930s. Given that elementary curricula for girls was light on science content in the first place, and only taught in connection to motherhood, the science bias was broadly cut from the curriculum. If the point was to teach elementary school girls how to carry out the steps to clean and iron laundry, to cook simple meals, and to understand how to clean a home, there was very little science needed. Technology and commerce had advanced to the point where women no longer needed to make their own cleaning powders – they could be gotten in the general store, so it was not necessary knowledge to teach in the 1930s. The effect of these decisions to promote utility above intellectual interest and analysis tend to counter the view of the secondary school teachers that domestic work required an intelligent mind. Working-class girls who were educated under this transition were given little science and were made to work preparing meals, sewing samplers, and practicing laundry work. For their educational outcomes, the goals of domestic subjects' instruction were at odds, where the middle-class was taught the science of domestic life, while working-class girls were taught the duty of family service. Their views on their education are expressed in Chapter 6.

The impact of these directives where the former was ignored, and the latter followed, was evident in the Dormer Wells Senior Girls' School Syllabus from Bolton and the Worktown Mass Observation project. The syllabus, obtained surreptitiously by a local working for Mass Observation in 1938-1939, lacks any domestic science instruction except in the third year. The two previous years' study involve botany and nature study with basic elements of physics (heat) and chemistry (absorbing carbon).

The year three syllabus is as follows:

> Autumn Term: Hard and soft water; solvent powder; town [water] supply, taps. Soap. Food digestion, food storage. Circulation. Physiology of hearing and feeling.
>
> Spring Term: The skeleton and muscles of the body. Disease prevention, bacteria, germs, vaccination. Electricity, fundamental laws, circuits, cells, bells. Heat and light production. Telephones. Electroplating units.
>
> Summer Term: Methods of cleaning. Friction in solvents; bleaching agents; grease removers; benzene, petrol. Disinfectants, Lister and Pasteur. Preparation of oxygen. Revision of burning and breathing.[77]

This single year of biology and physiology conforms with NUWT guidance to leave such subjects until the end of school life. However, the school did not have any formal domestic instruction apart from needlework, and handicrafts like weaving, leatherwork, and bookbinding. The contents of the remainder of the timetable included Scripture, Mathematics, History, Geography, Art, Music, Physical Training, English Language and Composition and English Literature.[78] Rather than designate forms and streams, the school mistress labeled the students as bright, dull, and dullest and varied the kind of instruction girls received based on this

[77] Dormer Wells Senior Girls School Syllabi, The papers of Mass Observation Archive, SxMOA1/5/16/49/H/6. The Keep, Brighton. (Hereafter, The Keep).
[78] Ibid.

categorization.[79] What is certain is that girls' education was more about economy and thrift than it was about providing equal opportunity in academic education to the working-class.

Outcomes of Working-Class Domestic Instruction

Given the effect of these two measures, one to rationalize and standardize instruction in training centers, and the other to remove a scientific bias from instruction altogether, what did elementary girls' domestic instruction offer by 1938, and what were its central problems? The NUWT commissioned a survey on the Teaching of Domestic Subjects in 1939. They received 124 replies from 60 LEAs. The information given covers time allotted to each subject, the age of pupils, the type of accommodation that girls had for training and whether it was suitable, if boys and girls were taught domestic subjects, and if girls must provide materials for various courses and purchase the end result. To begin, Table 17 breaks down time given to each subject in domestic instruction based on the answers respondents' gave to the questionnaire.[80]

Table 17: NUWT Domestic Subjects in Timetable per week where n=schools

Subject	None	½ hour-1hr	1 hr -1hr 45 min	2 hrs	2 ¼ - 2 ½ hr	3-5 hr	Half day	Whole day
Homecraft	5	1	2	4	11	6	15	28
Needlework	--	1	19	30	8	17	6	3
Infant Care, Hygiene	8	31	16	--	--	--	--	--

The data here are instructive because they give a view of how invested LEAs were in the various branches of domestic instruction. Needlework was the only compulsory subject by government statute, so it would stand to reason that it would take a considerable portion of the weekly timetable. Homecraft, here inclusive of cookery, laundry, and home management and cleaning,

[79] Ibid. The Listings include terms bright, slower, dull, and duller in the divisions in content like history and mathematics.
[80] Questionnaire on Teaching of Domestic Subjects, National Union of Women Teachers, Education Committee, March 11, 1939, UWT/D/28/17, Stack 9. Papers of the National Union of Women Teachers, Newsam.

was most typically taught for a half day every week for a term or a year, or for a full day in a week, or for a six-week long course. Infant care and hygiene were less widespread subjects, and lessons there were much shorter, the average being between 30 minutes to an hour. In some schools (10), biology was taught in connection with hygiene, and in many cases, infant care was included in the standard housecraft curriculum, while hygiene was taught either incidentally or in connection with biology or a formal science course. In at least one school, a nurse came in for eleven separate lectures to teach girls about infant care. These details reveal the varied nature of provision for science instruction where domestic instruction occurred.

Next, the questionnaire moved to whether or not individual schools had their own domestic science rooms or if their students attended a training center and assessed conditions there. Table 18 represents this breakdown: [81]

Table 18: NUWT Domestic Instruction in School or in Centers, Science Rooms

	Domestic Instruction Rooms	Training Centers	Half and Half	Science Room in School	No Science Room	Share with Boys	Labs
Number of Schools	78	16	27	59	35	5	3

These data are critical in reflecting the move away from sending students to domestic training centers, at least in urban areas. Seventy-eight of the 140 responses note that the school had its own rooms in the school building or adjacent to it on the same property. Only 16 sent out girls for all domestic instruction. Twenty-seven schools offered some instruction in the school but sent girls out for certain subjects like housecraft in a furnished flat provided at the training center. Provision for science rooms was not ideal, with only 59 reporting that such rooms were available. Thirty-five schools had no science rooms at all, and in five mixed gender schools, girls

[81] Ibid.

shared with boys. Laboratory rooms were exceedingly rare. The provision of science rooms does show a lack of investment in science generally, and girls science instruction specifically, in 1938. These data confirm the shift away from a science aligned domestic instruction in elementary schools. The NUWT survey asked why science rooms were not provided and respondents stated that, in eleven cases, the added expense and the negative attitude of the LEA toward science rooms in girls' schools prevented funding. Twelve schools had no accommodation at all because buildings were of an old style and out of date. In eight schools, there were plans to reorganize domestic subjects' departments, but the building had not yet begun.

The questionnaire then moved to questions of supply of goods for cookery, laundry, and needlework classes, and if girls also had to buy whatever food or garments they made in class. Table 19 reflects these statistics.[82]

Table 19: NUWT Provision of materials, Schemes for taking home goods

	Girls provide all materials	LEA provide all materials	Half and Half provision	Schools or center provide	Products sold out	Girls take home	Girls must buy goods	School dinners
Number of Schools	40	26	41	7	84	15	12	1

The issue that sticks out in this data set is that girls may attend school for free, but their domestic science courses, which nearly all LEAs required, came with additional costs that boys did not have to consider in their woodwork or science classes. The normal arrangement was that girls should provide all food ingredients for cookery, any fabric for needlework, yarn for knitting, and pieces of laundry from home to prepare and clean at school. Just as common was that LEAs or schools provided half of the expense and the girls provided the other half. Only in a small percentage (26/140) did the LEA or school provide all supplemental materials. Worse still was

[82] Ibid.

that in the majority of cases, girl's products were sold, even if they provided the materials. Either most food made was sold to third parties or girls were required to buy it if they wanted any to take home. Any clothes or tablecloths girls made would usually be sold. Only if something could not be sold was it ever given to girls. Only in 15 schools could girls keep what they made and supplied outright. Two respondents laid harsh criticism on this practice of making girls pay extra to provide materials and to keep what they made. The first, a teacher at West Ham Senior Mixed School stated, "In a woodwork center, boys are given their work to keep, free of charge, except perhaps for hinges or ornaments, etc.; while girls must pay for dishes made a cookery."[83] The second, from Glamorgan Girls' School in Wales, stated "girls have also to provide aprons for their housecraft duties and they are called upon either to provide needlework materials or buy that provided by the Authority. Girls are called upon constantly for payments whereas their parents are equal ratepayers with those of boys."[84] More generally, a respondent from Brentford and Chiswick Senior Girls' School stated "I consider it a great injustice to girls to waste their short school life on domestic subjects. Any instruction in these should be reserved for extra time at school."[85]

These three views of teachers uncover the inequality of class and gender bias in elementary education for working-class girls. Given that LEAs desired a utilitarian education in domestic subjects for them, it appears that girls had to learn thrift by providing their own materials for their courses. Some might argue that this was practical training in the cost of goods so that as a wife, the girl would know how to budget, and to make the most of her husband's

[83] Other Information. Questionnaire on Teaching of Domestic Subjects, National Union of Women Teachers, Education Committee, March 11, 1939, 4. Papers of the National Union of Women Teachers, Newsam. UWT/D/28/17 Stack 9. Newsam.
[84] Ibid.
[85] Ibid., 3.

income. The girls spent an increasing amount of time in domestic courses as they neared 14 and school leaving, so less and less time was spent on mathematics or science. And the tenor of their education had switched from a more academic, scientific treatment, to a practical and limited scientific training by 1939. It appears unfair that girls were expected to perform unpaid labor and were not even allowed to keep what they made. There was no sense of accomplishment for them. In effect, the school room was a sweated-out factory floor, and these girls were being exploited in the name of making them humble, dutiful future wives and mothers.

Furthermore, the democratizing notions of the NUWT to make homecraft required for boys were not realized. The questionnaire reflects that in 87 schools, boys either did not attend or did not take any domestic courses. In 18 schools, boys took traditionally male craft classes like woodwork, metal work, and gardening. Only in six schools did boys take cookery and laundrywork.[86] While this information is not unexpected, it only emphasizes the degree to which girls' educational time was sacrificed to manual work of practical nature. A natural consequence of imposing a purely domestic course in terminal elementary school education ensured working-class girls could not seek work or pursue careers beyond their narrow training for home life. Again, the NUWT was on the forefront of these observations. In 1923 the Union had made a resolution against compulsory domestic subjects' instruction:

> This Conference considers the imposition of compulsory domestic courses on girls under the age of fourteen an unfair handicap on a girl's education as compared with a boy's for future wage-earning employment, and is an additional disadvantage to that already imposed on a girl by social custom in her own home.[87]

A later memo by the NUWT was critical of the excessive time which domestic instruction took up in a girl's school week and the academic disadvantage this caused.

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[86] Questionnaire on Teaching of Domestic Subjects.

[87] Report of Conferences on Domestic Subjects, National Union of Women Teachers, Papers of the National Union of Women Teachers, UWT/D/28/17, Stack 14. Newsam.

> There is at present a tendency to extend time given in public elementary schools to the teaching of domestic subjects to girls at the expense of their general education,,.[A] result of this emphasis placed on domestic work is that in some schools syllabuses are arranged so that history lessons shall deal with the history of things used in the home, rather than with the development of movements, forms of government and the responsibilities of citizenship; geography lessons are largely concerned with the sources of food supplies, and arithmetic is almost exclusively confined to household accounts and such matters as the measurements of carpets and curtains. …but it is of [the NUWT's] opinion that undue emphasis on domestic training of girls only [sic] is an undesirable departure from equal standards of education which have been set up for public elementary schools ever since they were established in 1870. Moreover, if this practice persists girls are likely to be severely handicapped in the attainment of higher education…it is not right that so much of this training should be given exclusively to girls…at the expense…of their prospects of earning a living in other walks of life, such as the learned professions, the civil service and the higher posts in industry and commerce.[88]

What is surprising here is the function of gender bias in education and the significant impact this kind of education had on the future prospects of working-class girls and women. It is shocking that this was the state of girls' elementary domestic instruction in 1939 in a period of scientific advance and the proliferation of labor-saving appliances in the home. At the outset of WWII, working-class girls were less educated in science than their mothers and grandmothers at the outset of WWI, due in part, to the unintended consequences of that war on the decrease in male population, and the decline in births in the 1920s. The Interwar era was an attempt to use educational policy to remake British society to what it was prior to WWI. The effect of these initiatives on working-class girls' education was regressive in kind and quality of education. Domestic subjects' instruction experienced a bifurcated trajectory, one which privileged the middle-class with advances in science content, but disadvantaged the working-class by reducing domestic work to a form of exploitation of girls' labor. The curriculum in 1938 for elementary instruction lacked the rigor it possessed prior to 1914, leaving a generation of girls with a diminished quality of education.

[88] Memo on Teaching Domestic Science in Elementary Schools.

Conclusion

The development of domestic subjects' instruction between 1902 and 1944 saw at once expansion and contraction, caused by inherent class biases. The period saw the height of allied science teaching in domestic courses through the expansion of training college diplomas and certificates for girls educated in secondary schools, who intended to become secondary domestic science teachers. But science was cast aside for the working-class girl who would receive only an elementary education, despite the efforts of the NUWT which advocated for more science in elementary education. In consequence working-class girls' education was never romanticized as being academic, or in allowing her upward social mobility. The average girl's education was practical, utilitarian instruction in how perform household chores to middle-class standards in substandard, unhygienic housing. The hypocrisy of her situation is painfully apparent. She was educated just enough to allow her to be a moral anchor to her future family. Yet, her education was uniquely vocational in character, though educationalists claimed it was not. She was taught to labor at domestic tasks with no reward in school, and with the only future reward being the assumption that she could keep a tidy house and raise healthy babies, who would be taught to reproduce society in their turn. That science instruction was on the decline by 1939 reveals the shift in attitude towards educating all children to the same level, and instead reveals that working-class girls received the least academic education of all children and were taught almost exclusively to accept their position, and to perform household duties as a matter of fiat. After all, that was the point of "educating" girls. Mrs. Wintringham, an NCDS member, summed it up the best when she wrote "thus, the teaching of domestic subjects in schools is concerned with life itself, and every opportunity should be given for such instruction. It is for the good of England if every girl is a skilled housewife, because upon her depends in great measure the stamina and

physical fitness of our nation." [89] This sort of education was for citizenship and service to the State that had undertaken the expense of training her to fulfill her duty. As such, the changes in domestic subjects' instruction fit that end for working-class girls. They got less and were expected to do more than anyone else in society to maintain the status quo of gender and class division. The following chapter will emphasize working-class girls' reproductive roles in society to stave off the degeneration of the British race, in the most important effort to maintain the social status quo.

[89] Mrs. Wintringham M.P. "Why Domestic Subjects Should be Taught in Schools." *Westminster Gazette* April 11, 1923. UWT/D/28/17 Stack 5. Papers of the National Union of Women Teachers. Newsam.
See also, Ina Zweininger-Bargielowska, *Managing the Body: Beauty, Health, and Fitness in Britain, 1880-1939* (Oxford: Oxford University Press, 2010), who argues that physical fitness courses were aimed at the same end, improving the health of the nation to prevent a disaster like the Boer War conscripts being unfit to fight.

Chapter 5 Sex Education and Eugenic Preoccupations

Introduction

On looking back to her teenage years, Mary Rainer wrote about how little she was taught about the facts of life. "…We were all a bunch of know nothings…with sex. Our chief weakness lay in the lack of instruction from the proper source on all subjects, we were ignorant, but innocent at the same time, few of my contemporaries among the females really knew the dangers of promiscuity." Of her first romantic relationship, Rainer recalled that "I have regrets, not about the things I did do, but about the things I did not do, we still had not rid ourselves of the Victorian prudery."[1] Similarly a MP, Frederick Handel Booth, deplored the silence that prevented any education in sex among British school girls. During a House of Commons debate in 1912 on a bill to punish procurers of child prostitutes, Booth argued, "I consider the real responsibility of the grave evils with which we are now faced arises in a large measure from the ignorance of those youthful people, an ignorance which has been encouraged by the prudery of the older people… I ask whether there is not the gravest responsibility in leaving these young people in entire ignorance of their natural functions."[2] Ignorance and innocence, were in fact the desired outcome of a girl's education. Though through motherhood, girls exercised their

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[1] Mary A.M. Rainer, *"Emma's Daughter,"* 2-644. John Burnett Archive of Working-Class Autobiography, Brunel University Library. 1763, 1770. (Hereafter, Brunett)

[2] Frederick Handel Booth, MP, "Criminal Law Amendment (White Slave Traffic) Bill," House of Commons Debate 10 June 1912 vol 39 cc571-627 [580]; https://api.parliament.uk/historic-hansard/commons/1912/jun/10/criminal-law-amendment-white-slave#S5CV0039P0_19120610_HOC_322.
See also Lynda Nead, *Victorian Babylon: people, streets, and images in nineteenth-century London* (New Haven, CT: Yale University Press, 2000).; Deborah Parsons, *Streetwalking the Metropolis: women, the city, and modernity* (Oxford: Oxford University Press, 2000).; Judith Walkowitz, *City of Dreadful Delight* (Chicago: University of Chicago Press, 1992), for discussions of rogue femininity and the problem of sexual deviance in the late 19th century which drove popular anxiety for the White Slave Traffic Bill.

citizenship in the British State, their education did not include conception or the act of sexual reproduction itself.[3]

In the first two decades of the twentieth century, there was little concerted effort to teach sex education apart from the convergence of moral education and prescriptions with personal hygiene which was slowly gaining ground as a part of housecraft courses for girls. Boys may have gotten less sex instruction than girls had, or been told a brief account of where babies came from, or been left to observe animal reproduction in rural areas and to draw conclusions on that information alone.[4] The leading works on the history of sex and sexual change in Britain such as Szreter and Fisher's *Sex Before the Sexual Revolution,* Cook's *The Long Sexual Revolution,* and Hall's *Sex, Gender, and Social Change in Britain,* all arrive at the same conclusion – that from the late Victorian era, through the 1940s, there was very little concerted effort to educate children in matters of sex.[5] This is significant in the scope of girls' primary school curriculum because if the emphasis was placed on morality and religiosity across subjects, paired with notions of duty and service inculcated to family, it was then immaterial where children came from if the girl was trained to care for them in due course. In the few places where biology was taught, the human reproductive system was wholly ignored, and if anything regarding sex was taught to girls at all, it dealt only with a brief lecture on menstruation.[6] Silences here were

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[3] Anna Davin, "Imperialism and Motherhood," *History Workshop* no. 5 (Spring, 1978): 12-14.; Stephen Heathorn, *For Home, Country, and Race: Constructing Gender, Class, and Englishness in the Elementary School, 1800-1914* (Toronto: University of Toronto Press, 2000), 165-169.

[4] J.J. Thomson, *Science Education in Great Britain: from 'Report of the Committee appointed by the Prime Minister to Inquire into the Position of Natural Science in the Educational System of Great Britain*. (London: H.M. Stationery Office, 1918), 21, 25.; Nancy Day, Untitled Autobiography, 2-220, 21. Burnett. – she discusses learning the facts from life on the farm watching animals.

[5] Hera Cook, *The Long Sexual Revolution: English Women, Sex, and Contraception 1800-1975* (Oxford: Oxford University Press, 2004); Lesley A. Hall, *Sex, Gender, and Social Change in Britain since 1880* 2nd ed.(Houndmills, UK: Palgrave Macmillan, 2013).; Simon Szreter and Kate Fisher, *Sex Before the Sexual Revolution: Intimate Life in England 1918-1963* (Cambridge: Cambridge University Press, 2010).

[6] Jane Pilcher, "School Sex Education: Policy and Practice in England 1870 to 2000," *Sex Education* 5, no. 2 (May 2005): 153-170.; See Edith Cooper, *A Science Scheme for Girls Based on Biological Teaching.* (London: National Union of Women Teachers, 1930).; and See Zoe Dawe, "How You were Born," October 1935. Papers of the

deliberate yet puzzling because of the social anxieties that drove girls' education toward their role as wives and mothers. Yet, the moral strictures of the sort of instruction girls received seemed to leave to faith that their education and their parents would guard them from the risks of premarital sex by avoidance and abstinence, alone.

In this regard, the moral undercurrent of British education through its association with and assumption of basic Christian values continued to hold sway. But it did so in a way that was at odds with the greater mission of working-class girls' education – to teach her to be a competent wife and mother, to reproduce the state both socially and biologically. A girls' education for citizenship, as tied to her reproductive role, was bound up with graver social concerns like thrift, poverty, urban overcrowding, the physical deterioration of urban children first noted during the Boer War, and emerging concerns about the decline of the birthrate, not only among the working-classes, but among the middle-classes as well.[7] These broad social problems fell under the umbrella of the term "social hygiene" and were met with various efforts of reform to reverse the deleterious impacts that they had on the British population.[8] Still the one demographic that had not been sufficiently reformed at the turn of the twentieth century were working-class mothers and the girls who would soon become mothers themselves. This chapter focuses on the anxieties of educationalists, social reformers, and eugenicists as they struggled to

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National Union of Women Teachers, UWT/D/28/24, Institute of Education, University College London, Newsam Library and Archives, for examples of talks given to girls regarding menstruation and conception. (Hereafter, Newsam)

[7] See Anna Clark, *The Struggle for the Breeches: Gender and the Making of the British Working Class* (Berkeley: The University of California Press, 1995).; Gertrude Himmelfarb, *Poverty and Compassion: The Moral Imagination of the Late Victorians* (New York: Vintage Books, 1991).; Lynn Hollen Lees, *The Solidarities of Strangers: The English Poor Laws and the People, 1700-1948* (Cambridge: Cambridge University Press, 1998).; Ross McKibbin, *Classes and Cultures: England 1918-1951* (Oxford: Oxford University Press, 1998).;Gareth Stedman Jones, *Outcast London: A Study in the Relationship between Classes in Victorian Society* (Oxford: Oxford University Press, 1971).; Paul Thompson, *The Edwardians: The Remaking of British society*, 2nd ed. (London: Routledge, 1992) for information on working-class history in the Late Victorian Era and early twentieth century, and the social ills of poverty which caused social reformers to act to reverse the decline of British urban industrial society.

[8] Greta Jones, *Social Hygiene in Twentieth Century Britain*, (London: Croom Helm, Ltd., 1986).

combat the decline of the birth rate in absolute terms in Britain, while at the same time advocating for a decrease in reproduction of working-class women.[9] The paradox of this crisis was complex. The British State was concerned about the loss of middle-class children through the decline of birthrate, yet eugenics viewed the working-classes as unfit. Even if working-class women's higher fertility met with high proportions of infant mortality, observers feared their reproduction would dilute the vigor of British stock if left unchecked. Though less desirable racially, for the eugenicists, reformers and educationalists believed that working-class girls needed to be better educated to prevent premature loss of life for their babies, and to rebuild the British race. Thus, an education for motherhood, as has been demonstrated in the previous chapter, was the answer. However, the issue became more complicated due to popular anxieties about WWI and loss of the best of that generation of men, paired with the ravages of venereal disease, and another world war. Ultimately, some reformers realized that a more realistic approach to biological teaching was needed to combat the sexual ignorance of the sort that Mary Rainer struggled with, given the social concerns of the period between 1902-1944.

Eugenic Anxiety in Sex Education

The ideological origin of both the aim of girls' education to equip them for motherhood, and the eugenic fear for the British race, as it were, lay in nineteenth century science and social science. Each aspect was tied to the development of the concept of human degeneration into a more primitive non-human form. Social investigation into crime, criminality, and later measuring physical deviance through phrenology and anthropometry led to the theory of social

[9] Richard A. Soloway, *Demography and Degeneration: Eugenics and the Declining Birthrate in Twentieth Century Britain,* (Chapel Hill, NC: The University of North Carolina Press, 1995), xvii, xviii, 6.; William Henry Hadow, *Board of Education Report of the Consultative Committee on the Education of the Adolescent* (London: H.M. Stationery Office, 1926), 144 – mentions the declining birth-rate and its effects on school provision.

degeneration. It was tied to class, given that the lower orders appeared to be physically different from middle-class people, despite the idea that poverty was a moral condition that a better character could cure. Social scientists and investigators became convinced that habitual criminals and paupers and the unemployable were a biologically distinctive set of individuals reverting to a primitive form. The fear was that this class, the residuum, was growing at an alarming rate, because the birth rate among this group and the very poor was much higher than that of the middle-classes. Based on Thomas Malthus' work, observers felt it would not be long until the ranks of the unfit, supported by a geometric population increase would overwhelm British society. Observers such as Spurzheim, Gall, Francis Galton, Herbert Spencer, and to a lesser extent, Charles Darwin believed that this condition of biological degeneration was heritable and had to be prevented wherever possible. Spencer, other social Darwinists, and social investigators like Charles Booth proposed removing the residuum from the rest of society and incarcerating them, until they died out of natural causes. Others like Francis Galton, the Father of Eugenics, felt the solution was in limiting births for the lower orders and encouraging more reproduction between members of the middle and upper classes to build up the pool of fit, talented men and women who would pass on their desirable traits. On the one hand, was negative eugenics or dysgenics which sought to prevent births of those deemed socially unfit, while on the other, the main goal was selective positive eugenics to breed the best possible British citizen.[10] Both aims

[10] See: Charles Booth, *Life and Labour of the People of London, First Series: Poverty*, v. 1-4 (London: Macmillian, 1902); Francis Galton, *Hereditary Genius: An Inquiry into its laws and consequences* (New York: D. Appleton, 1875).; Charles Darwin, *Descent of Man and Selection in Relation to Sex* (London: J. Murray, 1971).; Alison Bashford and Phillippa Levine, *The Oxford Handbook of the History of Eugenics* (Oxford: Oxford University Press, 2010).; David G. Horn, *The Criminal Body: Lombroso and the Anatomy of Deviance* (New York: Routledge, 2003).; Jones, *Social Hygiene in Twentieth Century Britain*.; Phillippa Levine, *Eugenics: A Very Short Introduction* (Oxford: Oxford University Press, 2017).; Cesare Lombroso, *Criminal Man*, trans. Mary Gibson and Nicole Hahn Rafter (Durham, N.C.: Duke University Press, 2006).; Daniel Pick, *Faces of Degeneration: A European Disorder, 1818-1918* (Cambridge: Cambridge University Press, 1989).; Nicole Rafter, *The Criminal Brain: Understanding Biological Theories of Crime* (New York: New York University Press, 2008).; Soloway, *Demography and Degeneration: Eugenics and the Declining Birthrate in Twentieth Century Britain*.

influenced girls' education for motherhood as well as moral and sex education in the early twentieth century.

In working-class girls' domestic instruction, the emphasis was on education in infant care, basic first aid, and hygiene, or the cleanliness of the home environment. This was due to the high infant mortality rate among the working-poor for babies under one year. Many educationalists and social reformers such as the Fabians believed that knowledge and improved housing conditions would prevent infant death due to simple maternal ignorance.[11] While British elementary education largely catered to working-class children, there was an implicit sense that if these children were given a better education than their parents, that their children would be healthier, stronger, and more morally fit (religiously, ethically, socially acceptable) than the present child, so that hygiene and mothercraft courses could reverse the deterioration of the British race. Successful motherhood was the girl's social duty, and the way in which she would practice her citizenship. In this regard, British education was essentially more positive than the broader eugenics movement in that it encouraged moral and material improvement among the working-classes. What information was imparted to this class was very limited in spite of the importance of mothercraft. In the early years of the twentieth century, there was no discussion in hygiene courses about birth control methods, or how babies came to be –just that a baby came from a loving marriage, and how to care for it.

Morals in Sex Education

Similarly, moral instruction, in the days before the adoption of agreed syllabi of religious instruction sought to teach proper social conduct to children, either in a purely secular manner, or

[11] Jones, *Social Hygiene in Twentieth Century Britain*, 9, 11.; Soloway, *Demography and Degeneration*, 5-8, Op cit Sidney Webb "The Decline in the Birth-rate." 1907.

as increasingly tied up with Christian theology. A critical component of this instruction was sexual purity. Whether secular or religious in tone, moral instruction was tied to eugenic concepts of race citizenship centered around parenthood and proper social conduct. For boys, this was taught in the form of chivalry, and for girls, modesty and submission.[12] Frederick J. Gould was an early and longtime proponent of secular moral instruction. It seemed fitted to adoption in state-aided elementary schools which were, at the time, vaguely Christian, but mostly secular in character between 1900 and 1914. In his proposed syllabus on *Moral and Civic Instruction for Elementary Schools*, he argued that the course would develop good feelings, excite the imagination, and train a child's reason to focus on conduct to promote character building.[13] Similar to the agreed religious syllabi, Gould's proposal was merely a suggestion, and with that awareness, he stated that allusions to sex education in his syllabus could be removed at the discretion of the teacher.[14] Subsequently, an early publication of the Moral Instruction League, of which Gould was a member and its most visible promoter, cloaked secular moral instruction in eugenic language. In a section on teaching self-respect, and self-control, the authors began with the topic of cleanliness for "the individual and the public health," and claiming that "control of the temper denote[d] strength," while "quarrelsomeness and sulkiness denote[d] weakness. The strong and the calm [were] happier than the weak."[15] Another anonymous pamphlet "Religious, Civic, & Moral Education" adopted an overtly eugenic tone.

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[12] Chivalry is mentioned in: R. Arthur, "The Moral Training of Children," White Cross League, Church of England Society Papers for Men No. XV. 1916, The Papers of the National Union of Women Teachers, UWT/D/25/1/6. Newsam.; Stanley A. Mellor, "Christian Ethics and Sex Morality," Union for Social Service of Members of Unitarian, Free Churches, and Kindred Churches, November, 1918 The Papers of the National Union of Women Teachers, UWT/D/25/1/11. Newsam.; J. Arthur Thomson, *Education and Social Hygiene* (London: The British Social Hygiene Council, n.d. The Papers of the National Union of Women Teachers, UWT/D/25/1/18. Newsam.

[13] Frederick J. Gould, Syllabus of Moral and Civic Instruction for Elementary Schools, 1914, 5, 6. Papers of Frederick J. Gould, FG/1. Newsam.; Moral Education League, Thirteenth Annual Report, 1910.,1, 2. LC 314 Parent Associations, Trades Union Congress Collection, London Metropolitan University Archives. (Hereafter, MET.)

[14] Gould, Syllabus of Moral and Civic Instruction for Elementary Schools, ibid.

[15] Moral Education League, Thirteenth Annual Report, 1910, 4.

Written in 1916, it considered the outcome of the Battle of the Somme, and the detrimental impacts of WWI on the health of the British nation. The author argued that the problem with Moral Instruction was that "the majority of teachers were not men and women of genius," and that the teaching was "done badly" and that could result in "mischief" undermining the point of instruction.[16] Genius here alluded back to Galton's first eugenic work *Hereditary Genius,* which claimed that traits like genius were heritable and existed in middle and upper-class lineages.[17] This anonymous author, believed that most teachers were not geniuses because of their lower class origins. The author may have also felt that because the best male teachers of had been the first to go to France, and had nearly all been killed, the general education of all British children would suffer at just a time when society needed to redouble its efforts to rebuild itself.

Religious Sex Education

Apart from its early adoption in 1905-1906, secular moral instruction did not greatly take off in the majority of Local Education Authorities (LEAs).[18] It became a fringe socialist issue tied to trade unionism and the movement toward purely secular instruction among the reformer intelligentsia.[19] However, domestic subjects' instruction did expand rapidly to include mothercraft at its core, as was demonstrated in Chapter 4. In this regard, as demonstrated with Edith Cooper's *Science Scheme for Girls,* from 1930, in Chapter 3, her one solution was to blend science with religion in teaching girls that motherhood was God's Plan for life.[20] In that regard, it would make sense that her biology lessons were readily adopted across Britain, because they

[16] Anonymous, "Religious, Civic, & Moral Education: A New Solution of the 'Religious Difficulty in the Schools' For After the War," 10. LC 116, Secular Instruction, Trades Union Congress Collection, MET.
[17] Galton, *Hereditary Genius.*
[18] Moral Instruction League Annual Report, 1905. 25 LEAs were teaching this course, but many with a religious bias. LC 314 Parent Teacher Association. MET.
[19] Such as the Fabians.
[20] Edith Cooper, *A Science Scheme for Girls Based on Biological Teaching.* (London: National Union of Women Teachers, 1930).

conformed to the Agreed Syllabi of Religious Instruction and served the purpose of expanding knowledge while presenting it in a way that would not violate social taboos regarding sex. Nonetheless, eugenic phrasing did creep in especially during WWI. For example, in an earlier publication, "The Teaching of Sex Hygiene in Schools," Edith Cooper, a long-time advocate of biological teaching and sex instruction, resorted to such language. She and her co-author, Mary Mason, stated that children needed this instruction because:

> every child born into the world has a two-fold obligation to fulfill: a duty to itself as an individual, and a duty to the race, neither of which can be adequately performed without an accurate knowledge of self; and since for the good the nation, we demand the fulfillment of the obligation, every child has the right to demand the necessary knowledge.[21]

Here, Cooper and Mason used language that supported three streams of thought: first, the religious emphasis on teaching the Nation of Israel in connection to the Nation of England and that both are God's chosen people. Nation the stood for Race, when focusing on specifically British conceptions of fitness and biological duty, as the eugenicists argued.[22] Third, it conformed to the goals of the State in teaching its citizens to reproduce themselves and their Christian democratic society.

Cooper and Mason recommended that infants and juniors be taught basic cleanliness, and modesty in hygiene courses, and paired it with nature study, first with plants, then animals to begin to learn about reproduction and fertilization. For senior students, instruction should convey privilege of parenthood by "preparing the mind for the Divine Plan of Reproduction."[23] As with her later pamphlet, Cooper also included here two talks about puberty for girls in addition to

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[21] Edith Cooper and Mary K. Mason, "The Teaching of Sex Hygiene," National Federation of Women Teachers, 1919, 1. Papers of the National Union of Women Teachers, UWT/D/28/24. Newsam.
[22] See Ina Zweiniger-Bargielowska, *Managing the Body: Beauty, Health, and Fitness in Britain 1880-1939* (Oxford: Oxford University Press, 2010), for a discussion on how physical education initiatives were used to discipline to bodies of school children to improve their fitness and general health, making them fitter prospects for carrying on the British race.
[23] Cooper and Mason, "The Teaching of Sex Hygiene, 5, 6.

their regular course, at age 14 or school leaving. Girls were taught that the onset of menstruation was "simply the working out of God's laws and [was]…natural," and that the uterus was "a special organ…created by God," to hold a tiny egg.[24] Cooper and Mason stated that references should be made to plant and animal examples where students previously learned about seeds, eggs, and fertilization. The authors warned though, that once this knowledge was taught, that it could not be shared with younger children because it would corrupt them and violate the sacredness of such information. Socially, it was still taboo for young children to understand the mechanics of sex. Cooper and Mason's suggested sex education course tied together biology, eugenic fears and obligations, and Christian moral instruction.

Similarly, Stanley Mellor wrote a pamphlet entitled *Christian Ethics and Sex Morality* which furthered the work done by Cooper and Mason in enunciating a Christian approach to sex education at the close of WWI. Mellor stressed the concept of monogamy as the social and moral ideal for marriage. He argued that a utilitarian view that "the chief purpose [of monogamy] was only the production of children for the State for the sake of continuing the race," was incorrect. Instead, the Christian purpose of "a spiritual connection and perfection of souls," took precedence given that marriage was a sacrament.[25] While he rejected the eugenic argument, Mellor tried to convince the reader that teaching self-discipline to control sexual arousal, and self-abuse (masturbation), would restore marriage to its rightful place in social life, and it would purify the nation's ills.[26] Mellor's pamphlet, then, revealed his anxiety that respect for marriage was declining while casual sex was becoming more common during WWI. In fact, Mellor was not alone in believing that that monogamous marriage and abstinence until marriage could solve

[24] Ibid, 8, 9.
[25] Mellor, "Christian Ethics and Sex Morality," 6.
[26] Ibid., 5, 8, 11, 12, 20.

a major problem that occurred during WWI. That problem was the rampant spread of venereal disease (VD) among the Tommies in France. By 1918, nearly 720,000 men from the UK alone had died in the war, and at least a million had been wounded or invalided out, in part due to disease, and VD like syphilis. Field hospital admissions for treatment of VD for British and Dominion troops totaled 416,819 during WWI. Though VD was not fatal, it did reduce manpower at the front through the course of the war.[27] The White Cross League, founded by Ellice Hopkins and Bishop Lightfoot, the former a champion of fallen women and ex-prostitutes, allied with the Church of England and committed to promoting male sexual purity and self-control. The White Cross League saw, as Mellor did, that the incidence of VD and its long term impact on health and fertility of both men and women was a sort of punishment for sexual immorality, and extramarital sex.[28] R. Arthur wrote in 1916 after the first reports on VD were published, that "parents must teach sexual purity" especially for their sons who fell into bad habits like self-abuse (masturbation) because of the taboo against discussing sex.[29] Dr. Arthur stated that sexual gratification would lead to acquiring VD and other lifelong disease, but that chastity would lead to perfect health. He argued that men should be taught chivalry toward all women, fallen or pure, and that if young men learned to be chaste there would be fewer women to save from unwanted pregnancies out-of-wedlock. But it fell to mothers to educate their daughters and to teach them about sex or else misery would result from their ignorance or vanity.[30] Arthur was particularly severe on women (mothers) whose "negligence" allowed their daughters to fall victim to the wiles of unscrupulous men. Here again, working-class mothers

[27] Richard Marshall, "The British Army's fight against Venereal Disease during the 'Heroic Age of Prostitution.'" http://ww1centenary.oucs.ox.ac.uk/?p=2255.
[28] Mellor, "Christian Ethics and Sex Morality," 12.
[29] R. Arthur, "The Moral Training of Children," 4-6, 14, 16.
[30] Ibid., 21.

were failing in their duty to raise and educate their children However, the majority of advice on educating sons to be aware of temptations like self-abuse fell to mothers too. Arthur argued that only once a boy reached puberty did his father need to discuss the matter of venereal disease as a consequence of premarital sex.[31] Again, this type of sex education was prescriptive, tinged with fear and retribution, reflecting social anxieties of the time that larger British society was doomed, due to ignorance, or conversely, immorality. Despite this dire outlook, Mellor argued that society needed to reckon with its sexual double standard for women. He spoke of the "excuses made again and again to cover unchastity in men, and the refusal to allow any excuse for a woman" or the fact that "conventional morality considers it right, that a woman, when she marries, should be a virgin, but exacts no similar stipulation of chastity from a man."[32] Mellor's view was significant given his criticism of patriarchal norms in sexual behavior. His pamphlet, however, did not specify which gender would be responsible for educating children in sexual morality – more often than not, it was presumed to be the domain of the mother.

A key criticism of mothers by these experts was that if they taught their children anything at all about sex or where babies came from, it was usually in the form of a myth, like the stork delivering the baby, or the cabbage patch, or the doctor who brought the baby in his bag.[33] Virtually every pamphlet denounced this practice of putting off inconvenient questions by

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[31] Ibid., 17.
See also Laura King, *Family Men: Fatherhood and Masculinity in Britain c. 1914-1960* (Oxford: Oxford University Press, 2015) for information on the expansion of affective fatherhood not only breadwinner fathering which was more detached from the responsibilities of home and childrearing. See Jessica Meyer, *Men of War: Masculinity and the First World War in Britain* (Houndmills, UK: Palgrave Macmillan, 2009), and T.G. Ashplant, *Fractured Loyalties: Masculinity, Class, and Politics in Britain, 1900-30* (London: Rivers Oram Press, 2007) for discussions on how notions of masculinity changed due to WWI as many men came home with deforming war wounds.
[32] Mellor, "Christian Ethics and Sex Morality," 5.; See also, Szerter and Fisher's *Sex Before the Sexual Revolution* discusses the attitudes of the oral history respondents in which men were supposed to be more knowledgeable in sexual matters than the female, to teach her what to do, despite the fact that his education was often less than hers on the issue.
[33] Board of Education, "Sex Education in Schools and Youth Organizations," Educational Pamphlet No. 119 (London: His Majesty's Stationer, 1943), 3. Papers of the National Union for Women Teachers, UWT/D/25/1/25. Newsam.

curious young children. Ellice Hopkins, the champion of women's sexual virtue, wrote a guide for mothers of boys on how to teach them about sex. She stated that it was natural for children to ask questions since they could observe the changes in their mothers when they were pregnant, and that it was wrong to lie to a child and allow ignorance to prevail, only to allow a "foul mouthed friend" to corrupt their understanding.[34] Interestingly, a working-class autobiography by Edna Bold confirms this scare tactic as fact. She recalled the day she and her twin brother learned what "SEKS" was:

> Revelation came one summer afternoon as we walked to school. We had to go part of the way along a high wall that divided the street from the railway. It was along this length of black, brick wall that a child overtook us and said, without introduction or preamble, 'Do you know where babies come from?' 'No,' we said, neither knowing or caring. Whereupon streamed out from the lips of the soft young mouth such a torrent of obscenity that we stood transfixed, unable to proceed. We were late for school. The fear and revulsion of 'Seks' crippled and stunted our natural appetite,…a dark and terrible business.[35]

Such, was the justification for Ms. Hopkins' warning to mothers to educate their sons before the "devil's foul lies, and not God's pure truth," took hold.[36] Hopkins' manual had a blank cover, in plain blue, intended no doubt for the middle-class mother who desired discretion in dealing with a delicate topic. Hopkins' literary allusions (Shakespeare, Chateaubriand) and use of medical terminology also indicate that the audience was not the working-class.[37] Much as Edith Cooper had, Hopkins cloaked her guide in terms of God's gift through reproduction, insisting that a discussion of reproduction was not some secret thing but a "wonderful thing, [that should fill a

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[34] Ellice Hopkins, *The Story of Life…Especially for the Use of Mothers of Boys* (London: The Walter Scott Publishing Co., 1918), 3, 4, 7, Papers of the National Union of Women Teachers, UWT/D/25/1/12. Newsam.
[35] Edna Bold, "The Long and Short of It, Being the Recollections and Reminiscences of Edna Bold." 2-85, 21. Burnett.
[36] Hopkins, The Story of Life…Especially for the Use of Mothers of Boys, 7.
[37] Ibid., 11, 12.

boy with] …a spirit of reverence."[38] Hopkins also referred to animal evolution as Cooper had, in terms of the Great Chain of Being, and of the order of Creation in Genesis:

> Roughly speaking, all life may be arranged as a golden ladder, ascending from the lowest organism to the highest; and to explain how life is propagated, we must begin with the simplest creature and gradually work up to the highest.[39]

She then proceeded to discuss amoebas and cell division as reproduction, then hydra and jellyfish, then plants to discuss the male and female contribution to fertilization, and then animal life where the male fertilized a female egg with spermatozoa. The process continued in discussing birds, bees, fish, frogs, and then mammals, and finally humans. As with Cooper, motherhood was the focus, and mother love the ultimate goal of animal evolution in that the higher order the animal, the fewer offspring, and the more devotion a mother could give to her young. The use of anthropomorphism of animals to give them human traits seemed to be a useful way for Hopkins to illustrate the love aspect of sexual reproduction, emphasizing the partnership of both parents, and connecting this to God's love and His plan for life. Hopkins wrote that:

> In the higher order of animals nothing can exceed the devotion of the mother of her young and their helpless infancy…And now at length, we come to the topmost step of all, 'the roof and crown of things,' Man, who can worship and serve the invisible God; who has God's voice within him, his conscience…; and who has been endowed with the power of endless life. Man, as a spiritual being incarnate in an animal body, takes up this great law of sex which we have seen running through animal creation, and lifts it up into the moral and the spiritual. The love which in animals only lasts for the brief time which is necessary for the production and rearing of all offspring, becomes in him a love 'that inhabiteth eternity,' and unites him to the mother of his children in the life-long union of marriage.[40]

To the sons who would one day be fathers, embodying God's spiritual love for his family, Hopkins cautioned that they should wait and not waste the "life-giving powers" of fatherhood, which are the slowest in development, and the most easily disordered…*All premature or wrong*

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[38] Ibid., 11.
[39] Ibid., 12.
[40] Ibid., 24, 26.

use of it is fatal to perfect health of soul and body [sic]. The less [he] think[s] of it…the better for [him].[41] While a blend of science and faith, the eugenic tinge crept into Hopkins' work too with a reference to the Teutons who did not allow men to marry until they were twenty-five. The first sign that this is a eugenic interpretation is the mention of Teutons themselves, the alpha race of Nordic Europeans in times of old, whom the Nazis adopted as the progenitors of Germans and whose phenotypic characteristics (blonde, blue-eyed) were used to exclude people from citizenship in the German state. The second is the notion of waiting to fully develop the body before procreation to assure that the best possible offspring are born to the race. By including this allusion at the end of her pamphlet, Hopkins imbued reproduction and chastity with a noble purpose, not only God's purpose, but the purpose of propagating the best men with the fullest and most enlightened knowledge and conduct.

Eugenic Resurgence in Sex Education

In response to the notion of the best men dying in WWI, who would not be allowed to father the best future children, Dr. George F. Buchan, a Willesden Medical Officer of Health, presented the crisis in his eugenic call for sex education. He wrote:

> Our stock of National Health is at present low. The Birth Rate [sic] is falling. During the four weeks that ended 5th October, 1918, the birth rate in Willesden was only 13.24 per thousand against a pre-war rate of 24.70 per thousand in 1914, a fall of 46.4 per cent. The medical examination of recruits for the army has revealed the fact that only 36 to 37 per cent of the male population of military age are 'A' men. Such men are suffering most heavily as a result of the war and the population therefore more than ever before will have to be carried on by men of lower categories.[42]

[41] Ibid., 29.
[42] George F. Buchan, M.D., Memorandum on the Teaching of Sex Hygiene in the Public Elementary Schools, Willesden Urban District Education Committee, 4 November 1918, 1. Papers of the National Union of Women Teachers, UWT/D/25/1/15. Newsam.

In order to reverse these devastating effects of the war, it would be up to girls to restore the balance to British society. Dr. Buchan felt that only if girls were educated on sex and their national duty, in essence, demystifying childbirth, would they then be able to be responsible with their bodies and conscious of their obligation to restore the population of the race via increased birthrates. He suggested a basic course of nature study, graduated to animal life at a later age, and emphasized that reproduction should be considered within the context of marriage.[43]

Similarly, another noted and prominent eugenicist physician, J. Arthur Thomson, felt that the threat of VD during the war was significant enough to warrant a national initiative to introduce sex education into elementary schools.[44] He believed, in short, that there was too much perversion, and not enough reproduction. "Many women live miserable degraded lives as instruments of men's sexual indulgence," he wrote. "Many men are abnormally sensual. There is much venereal disease." However, "too many men remain in selfish nominal celibacy…and too many women are left unmarried."[45] For Thomson both were dysgenic and could only be stamped out by proper sex education. Again, morality came into play here in defining premarital or extramarital sex as deviant, resulting in disease which either limited fertility or produced weaker children. The other issue was that the better class of men remained bachelors instead of performing their duty to marry and produce fit children to rebuild British society. For Thomson, accurate knowledge would encourage men and women to select their partners wisely to prevent poor matches where a "vitiated inheritance" could be passed on to children. The goal of his suggested sex education would link sex to love, to elevate it above lust. "That is the way of

[43] Ibid., 1-4.
[44] J. Arthur Thomson, *Education and Social Hygiene*,1-2.; Soloway, *Demography and Degeneration.*
[45] J. A. Thomson, *Education and Social Hygiene*, 1.

progress," he wrote, "a heightened tradition of loving," that would teach self-control, personal ethics, and Christian morals to young men.[46]

In *The Power and Responsibility of Womanhood,* a pamphlet published by the Eugenics Education Society, Violent Trench used the evocative language of Cooper and Mason, and Hopkins to tie sex education to "God's perfect plan in marriage." But Trench put the onus of responsibility for correct sex relations of the race on women who "must uphold the standard so that men see that we expect respect and demand honorable men."[47] For Trench, the purpose of sex education should be to teach girls their obligation to become mothers using a religious explanation of eugenic facts.[48] Of these, the most important was the natural law of God that called for reproduction, which Trench followed with a brief recapitulation of Hopkins' allusion to the great chain of life or the golden ladder, where for humans, mother love differentiates human reproduction from other animal reproduction.[49] Trench advised that in order to be good mothers, girls must look after their health and guard their bodies because the body was the "Temple of the Holy Ghost," and that meant that the era of the "conspiracy of silence" must end so that girls were fully aware of the implication that reproduction had in their lives.[50] Trench advocated that there should be no more myths and no more secrecy and shame surrounding the function of sex. But with this power of knowledge, came a responsibility to control one's actions so as not to "tempt men" and incite lust.[51] For Trench, self-control translated into the power to

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[46] Ibid., 6.
See again, King, *Family Men* for a discussion of how affective fatherhood became the norm and social standard for men to meet by the 1950s. To some extent sex education of this type which focused on love between parents may have actually resonated with the working-class populace given King's research.
[47] Violet Trench, *The Power and Responsibility of Womanhood: Written for Girls* (London: The Eugenics Education Society, n.d.), 3, 5, 9, 10. Papers of the National Union of Women Teachers, UWT/D/25/1/19. Newsam.
[48] Ibid., 10.
[49] Ibid., 3-5.
[50] Ibid., 6.
[51] Ibid., 8.

affect positive eugenics in that the girl would know what type of man to avoid and would then make a discerning choice of husband based on his "fitness as a potential father," and exclude men with detrimental "genetic conditions" to preserve the "health of the race" in order to produce a "finer race of men" than presently existed.[52]

Eugenicists in Britain saw their greatest influence and power from 1900 to 1914, even as their understanding of heredity was still simplistic and monocausal, meaning that scientists of the day thought inheritance of certain traits was governed by single genes and could be easily manipulated. Their central concern at the time was to increase the birthrate among the best members of society, and to find ways to reduce it among the poor. They did not readily admit that environmental factors influenced the condition of the poor nor that the poor could be educated to reduce their birthrate, and that if the environment and wages improved, their health would improve. Eugenicists were preoccupied about reversing the decline in the birthrate prior to WWI which is why they emphasized larger family sizes for middle and upper class people, to reverse the decline over time.[53] It was not uncommon for ministers to take up eugenics and promote it to their parishioners and connected eugenics to Christianity as several authors above have demonstrated.[54] However the impact of WWI on reducing the male population and further decreasing the birthrate meant that eugenicists established goals that would likely never be met. Advances in biology and genetics revealed that heredity was far more complex and governed by multiple genes, and in the post-war world, the condition of the poor gradually improved with the demolition of slums. The poor were educable and learned to practice birth control which most

[52] Ibid., 10, 11.
[53] Soloway, *Demography and Degeneration.*
[54] Christine Rosen, *Preaching Eugenics: Religious Leaders and the American Eugenics Movement* (Oxford: Oxford University Press, 2004).

eugenicists abhorred as dysgenic.[55] Birth control proponents like Marie Stopes, whose book "Married Love" served as a practical guide to the mechanics of sex was an underground favorite among the working-classes.[56] The Great War altered the social conceptions that eugenicists had constructed their arguments upon. During the 1920s and into the 1930s the influence of eugenicists declined, in part, because of the tension between eugenic policies for the middle-class and dysgenic solutions for the working-class whom were deemed less fit than their social superiors. Further, though allied with contraceptives proponents like Stopes, eugenicist platforms embraced the more radical option of sterilization of social undesirables but were not successful in getting such legislation passed through Parliament. In many ways the eugenics movement in Britain fell apart from its own internal divisions, further challenged by advances in genetic science that showed heredity was far more complex than eugenicists supposed.[57]

The Influence of Female Autonomy in War Work and Beyond

Yet, the one social change relevant to sex education not yet addressed was the impact of WWI on women's work and how working outside the home challenged the traditional, middle-class assumption that mothers had to be in a domestic setting. WWI caused a massive social change when women were asked to step into factory and office jobs for the war effort. Many thousands of women like Lottie Barker and Anita Hughes worked in munitions factories under grueling schedules and conditions.[58] A medical inspector of factories, Dr. Beatrice Webb (no

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[55] Soloway, *Demography and Degeneration.*

[56] Marie Stopes, *Married Love: A New Contribution to the Solution of Sex Difficulties* (London: G.P. Putnam's Sons Ltd, 1919).; Szreter and Fisher, *Sex Before the Sexual Revolution.*; Soloway, *Demography and Degeneration.*

[57] Soloway, *Demography and Degeneration.*

[58] Lottie Barker, "My Life as I Remember It: 1899-1920," 2-37. Burnett.; Anita Hughes, "My Autobiography," 1-357, Burnett.
See also Gail Braybon, *Woman Workers in the First World War: The British Experience* (London: Croom Helm Ltd., 1981).; Claire A. Culleton, *Working-Class Culture, Women, and Britain, 1914-1921* (New York: St. Martin's Press, 2000),; Elizabeth Roberts, *Women's Work, 1840-1940* (Cambridge: Cambridge University Press, 1988) and *A Woman's Place: An Oral History of Working-Class Women 1890-1940* (Oxford: Basil Blackwell, 1984); and Selina

relation to the Fabian Webbs) believed that "during the fourth year of war," when more and "more women were working in the Woman's Auxillary Corps and in factories and offices," that they should be taught how "to keep fit in this time of stress."[59] The advice in the first half of her pamphlet was concerned with how to address common medical conditions like anemia, respiratory disorders and digestion, while emphasizing how good health in these individual systems affected reproductive health. Dr. Webb promoted fresh air, exercise, a good diet, and good habits to limit the effects of illness. She stated that "we do not speak much about sex life," but in understanding her body and the function of her reproductive system, a woman should realize that "the most important thing [she] can do to help her country is to bring children into the world, healthy children."[60] It was of utmost importance during this temporary crisis that women in work did not forget their broader social function to become mothers.[61] Dr. Webb believed that a basic understanding for women of their own biology and health would allow them to make changes to improve and preserve their health for that end. Despite the exigencies of war work, the women should live their lives to be "worthy" of the men who were in the trenches who "would be fathers of their children."[62] Though moral in prescription, this pamphlet served an important function in educating girls and women who had left school, and provided a more biological approach to the practicalities of health in difficult conditions. After WWI, as is demonstrated by Edith Cooper's science syllabus in Chapter 3, a continuation or resumption of mother love, Christian theology, and a linear discussion of motherhood in the animal world was

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Todd, *Young Women, Work, and Family in England 1918-1950* (Oxford: Oxford University Press, 2005) for discussions of women's work, before, during, and after World War I.

[59] Dr. Beatrice Webb, "On Keeping Well," (London: Young Women's Christian Association of Great Britain, 1918), 3, Papers of the National Union for Women Teachers, UWT/D/25/1/13. Newsam.

[60] Ibid., 18.

[61] Dierdre Beddoe, *Women Between The Wars, 1918-1939: Back Home To Duty* (London: Pandora, 1989) for a discussion of the move to get women out of work and back into home life and motherhood during the interwar era.

[62] Webb, "On Keeping Well," 19.

taught to some, but not all girls. Most sex education was geared toward girls, perhaps at a rate of 3 to 1, and only girls of 13 or 14 were given some version of "the talk" where their menses and the work of the uterus were taught.[63] Secrecy and sacredness were maintained on the subject despite the disservice ignorance of sexual intercourse did to youth during the interwar era. Only during WWII did a more practical, more fully biological discussion of sex education occur, again though, this education took place largely outside of schools, in pamphlets and other campaigns designed to reach teen-aged girls and young women directly.

Science-Based Sex Education

In 1943, two documents were published in response to the effects of WWII on rates of VD, premarital sex, and women working in traditionally male roles outside the home. The first was a Board of Education publication "Sex Education in Schools and Youth Organizations," which stated that up until that point,

> it cannot be said that [sex] instruction has generally been undertaken in the schools…In no sense is it the accepted practice to include [in schools] instruction in the facts of sex, or specific guidance on the moral aspects of personal conduct and sex relationships.[64]

The Board felt that since parents were failing in their responsibility to educate their children, that steps had to be taken due to the demands of war given dislocation due to evacuation because of the Blitz, and laxity in social norms in consequence.[65] The Board discussed where sex education would be taught, and its proper place within marriage only for the purposes of procreation, with the traditional moral and religious connections emphasized.[66] The Board recommended that sex education be taught, again, mostly to girls in the context of their domestic subjects' courses on

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[63] Board of Education, "Sex Education in Schools and Youth Organizations," Educational Pamphlet No. 119 (London: His Majesty's Stationer, 1943), 6. LC 295, Parent Teacher Association, Papers of the Trades Union Congress Collection. MET.
[64] Ibid., 1, 2.
[65] Ibid., 4.
[66] Ibid., 5, 8, 14.

hygiene and mothercraft, or in connection with citizenship and religious instruction, which as has been discussed, was a common practice.[67] Even in 1943, the authors stated that very few schools provided biological teaching, so it would be difficult to advise including sex education in that course except where it was already taught.[68] Where biology was not taught, mothercraft and hygiene courses which were only taught to girls was the likely place in the curriculum for sex instruction to occur. The early school leaving age of 14 and the limitations of courses offered at the time, proved a challenge for the Board, which reflected that children did not gain adequate or useful knowledge of sex, even at that late date. Furthermore, the Board admitted that mothercraft courses were at that time inadequate for the purpose of sex education because they emphasized the care of an infant, not "its entry into the world."[69] Though the Board made multiple suggestions, they remained just that – suggestions. It is unclear to what extent schools adopted this teaching, if at all, during the height of WWII. The evacuation of school children from south England taxed an already overburdened system, and the Board requirement to teach an extra course seems an unlikely step most LEAs would take for all but the oldest children.

This scenario left room for the only alternative, a private organization to publish a pamphlet to assist young women. "The Approach to Womanhood," published by the Central Council for Health Education in 1943 provided the most comprehensive, biology-based discussion on the mechanics of sex. What sets this publication apart from the rest is the inclusion of anatomical diagrams of male and female sex organs, their function, and a frank discussion on how fertilization and pregnancy occurred.[70] The Council stated that "it is most important for us

[67] Ibid., 8.
[68] Ibid., 9.
[69] Ibid., 10.
[70] The Approach to Womanhood, The Central Council for Health Education, 7, 8. Papers of the National Union of Women Teachers, UWT/D/25/1/24. Newsam.

all to know something of this body of ours, and yet when we stop to think, we realize how little we really know of its workings…" after which a brief discussion of the brain, nervous system, heart and lungs were included before dealing with the reproductive organs.[71] The pamphlet then addressed digestion, the importance of exercise during menstruation, before turning to the topics of mating, sex impulses, and hormones. Like the earlier guides from the WWI era, the Council advocated for abstinence to preserve health until the body was mature in order to produce healthy babies, and emphasized sex within marriage only.[72] The Council also connected the incidence of VD to a lack of self-control as well as to unwanted pregnancy, and warned girls and women against leading on a man.[73] The language was very matter of fact, and could indeed scare someone reading it who lacked basic knowledge from school. In the end, a return to the language of monogamous Christian marriage was deployed to educate girls on the love that a sexual relationship produces within marriage and its benefits, but until that time, a girl should practice abstinence first.[74]

Conclusion

From the early 1900s to the height of WWII, very little materially changed in the extent that sex education was taught or how it was taught. Eugenic anxieties, and the disruption of life and social norms in WWI were swept away in 1919, when the men came home, demanding a return to normalcy. In the 1920s and 1930s that normalcy was represented in the social status quo that sought first to conform to traditional mores tied to Christian morality despite the continued decline in fertility rates among all classes. This meant that working-class girls

[71] Ibid., 2.
[72] Ibid., 11, 15.
[73] Ibid., 12-13.
[74] Ibid., 16.

continued to be taught on the assumption that they would be wives and mothers, and that the goal of education was to prepare them for this exercise of their female citizenship. The girls were taught little physical science or biology, and what little they did receive was grafted onto Christian cosmogony in order to serve and preserve the British-Christian state.

A subversive element of this education was the emphasis of control of the actions and location of the female body, even as woman's suffrage gained a foothold in 1918, and was extended to all women over 21 in 1928. The rapid expansion of Religious Instruction from the 1920s into the 1940s confirms that a prescriptive faith of thou shalt nots was desired by educationalists and churchmen in order to hold the line against further secularization and disintegration of Christian morality which focused on glorifying the love relationship of monogamous marriage, and the mother-love of sexual reproduction. For proponents of expanded religious instruction and sex education, their goal was the same – to promote marriage, family life, and social and biological reproduction. Where eugenics allied with this propaganda, it was welcomed, because it too was concerned about controlling women's reproduction whether reducing it or increasing it. In the end, the church and the state developed and deployed a system where religion and science worked together and sought to limit a girl's prospects in life so that the choice to marry was almost unavoidable. She was trained in biblical verse to convince her that this was right and just, and to use her sex and ability to reproduce as a tool to keep her tethered in the domestic sphere, no matter the changes of capitalist or wartime society that brought expanding careers. In this fusion of the expansion of religious education and a moral form of sex education centered on motherhood, to the ignorance of all else, the British state maintained the status quo for millions of girls whose lives only had one of two outcomes: marriage, family, and love instead of its antithesis, work, career, spinsterhood. Working-class

girls were taught that obligation meant love and that love was the ultimate good that God commanded them to embody. So for love, they were contained and circumscribed. The final chapter discusses how working-class women felt in old age about the control of mind, body, and spirit which British elementary education subjected them to as children.

Chapter 6 Recollections of Schooling – Gender and Class Biases Explored

Introduction

In her autobiography, Agnes Cowper, mused on her fate to be born female. Her mother had been bitterly disappointed that she, her second child, was a daughter instead of a son. In adulthood her mother shared her disappointment with Agnes, but said though "I did not feel pleased, but what…should I have done without you?" Agnes recalled that "any ground of complaint on the score of my sex gradually, but entirely receded by the subsequent arrival of six further sons in succession before the arrival of her last child, a welcome second daughter."[1] Agnes' story is instructive because it reveals the hidden labor of female children in the home setting as second mothers and helpers for their mothers who were raising multiple young children. Though having a girl was less desirable than having a boy for her young mother, in the end, it was the female children who helped carry out domestic chores and duties around the schedule of their schooling.

To this point, the history of girls' education in Britain has been discussed in terms religious influence and intent, the intentional differentiation of the curriculum by gender, domestic subjects training in preparation for a life as a respectable wife and mother, and finally through attempts at sex education. Within the context of early 20th century life, the strict gender bias of the era gained a structural and architectural legitimacy in educational policy, as mentioned in Chapter 3. Most schools segregated classes by sex, and many had separate entrances for boys and girls, with separate playgrounds, and different recess times to prevent

[1] Agnes Cowper, *A Backward Glance on Merseyside* (Birkenhead, UK: Willmer Brothers & Co. Ltd., 1948), 1-181, John Burnett Archive of Working-Class Autobiography, Brunel University (Hereafter, Burnett).

boys and girls from mixing.[2] It is clear that the curriculum for girls had to be dramatically different from the one for boys. The domestic subjects' courses that filled the timetable for girls over 11 years, conformed to the middle-class ideal of female domesticity, but were tempered by the demands that working-class women faced as workers and homemakers. Each aspect of this research provides important insights into what girls were taught, but few if any histories on education in this period focus on what the students themselves experienced of their curriculum or how they felt about the gender and class bias of their education in later life. While educationalists focused a girl's education on her future role as wife and mother, the early school leaving age between 12 and 14 from 1902-1944 meant there would be several years of working for a wage that filled her life before her assumption of domestic duties. The domestic bias of girls' education was meant to serve as double-training for girls who would enter into domestic service for a number of years, or allied work in institutions or businesses which provided domestic services like cooking, laundering, and care of the sick or invalid. It did not prepare girls for work in factories in the north of England and only a little for jobs as clerks or shop girls in the south.

Though girls' education was more practical rather than academic, it narrowly envisioned a future occupied by domestic duties whether in wage work or in rearing their own families. Selina Todd's *Young Women, Work, and Family* discusses this gap between school and marriage for girls in wage work in Britain and how they were expected to manage their work and personal lives by balancing familial obligations.[3] A larger body of work focuses on women's work within the domestic sphere. Elizabeth Roberts has written three histories of working-class women's

[2] Anonymous response to Longley, Papers of Lesley Longley, LL/1/2, 0851. Newsam Library and Archive, Institute of Education, University College London. (Hereafter, Newsam).
[3] Selina Todd, *Young Women, Work, and Family 1918-1950* (Oxford: Oxford University Press, 2005).

lives and domestic work, twice incorporating oral history testimonies to reflect the centrality of home life in women's life cycles.[4] Older children's incomes were vital to the wellbeing of the family. During periods of intense unrest and disruption like during WWI, girls' and women's work outside the home was key to stability on the homefront.[5] However, once the war ended, women were pushed out of work and back into domestic roles to make way for the returning veterans who needed wage work. Deirdre Beddoe's *Back Home to Duty* discusses the interwar shift in moving women's work back into the domestic sphere, especially married women who had been allowed to work during war-time.[6] This intensification of the domestic ideal was mirrored in the girls' elementary and secondary curricula of domestic instruction as discussed in Chapter 4. What remains to be seen, however is how effective that education was for the majority of girls who received it.

Method and Sources

This chapter seeks to insert the voices of working-class women into the analysis of the efficacy of gender differentiated instruction and the impact of poverty on their learning opportunities, beyond the domestic focus in the elementary curriculum. A critical source base to this analysis was collected by Lesley Longley during her Ph.D. research on girls' education during the interwar period, between 1990 and 1993 upon her death.[7] Ms. Longley was in her 70s and had herself been educated in the 1920s and had left school at age 14 as so many of her peers did. Her research was conducted in two forms, first in appeals for recollections in a magazine

[4] Elizabeth Roberts, *A Woman's Place: An Oral History of Working-Class Women 1890-1940* (New York: Basil Blackwell, Inc., 1984), and *Women and Families: An Oral History, 1940-1970* (Oxford: Blackwell, 1995), and *Women's Work 1840-1940* (Cambridge: Cambridge University Press, 1995).
[5] Gail Braybon, *Woman Workers in the First World War: The British Experience* (London: Croom Helm Ltd., 1981).; Claire Culleton, *Working-Class Culture, Women, and Britain, 1914-1921* (New York: St. Martin's Press, 2000).
[6] Deirdre Beddoe, *Women Between the Wars 1918-1939: Back Home to Duty* (London: Pandora, 1989).
[7] From the Papers of Lesley Longley, 1988-1993, LL/1/1 and LL/1/2. Newsam.

called *Yours* and in *The Guardian* newspaper, and by survey to those who responded. Longley stated in letters to respondents that her focus was "based on the assumption that working-class girls in elementary schools received an education that trained them for domesticity, [and] that all working-class girls were doubly handicapped, partly through being girls and also through working-class."[8]

Two other bodies of source materials contain women's recollections of their schooling and the form it took in their experience. The first of these is John Burnett's Working-Class Autobiographies held at Brunel University. Burnett, a social historian of food and the working-class life experience came to use working-class oral histories and memoirs in works such as *Useful Toil* and *Destiny Obscure*.[9] He used the radio and the press to advertise for submissions of unpublished working-class memoirs in the 1960s and 1970s, convinced that the average person was more culturally literate and engaged than had been presupposed by historians. In the 1980s, Burnett joined with David Vincent and David Mayall to compose the authoritative three volume bibliography of all extant working-class autobiographies from 1790-1945 in Great Britain, entitled, *The Autobiography of the Working-Class*.[10] Over 800 samples were identified and were cited in the bibliography, and today 230 autobiographies are held at Brunel University in Burnett's Archive of Working-Class Autobiography.

The second set of sources are records collected by Mass Observation for the Worktown project, created by Tom Harrisson, a program which sought to conduct a sociological study of working-class life in the northern industrial town of Bolton during the 1930s and 1940s.[11]

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[8] Lesley Longley, Letter to Lilian Fordham, February 19, 1992. Papers of Lesley Longley, LL/1/1, 0950, Newsam.
[9] John Burnett, ed., *Destiny Obscure: Autobiographies of Childhood, Education and Family from the 1820s to the 1920s* (London: Allen Lane, 1982) and *Useful Toil: Autobiographies of Working People from the 1820s to the 1920s.* (London: Allen Lane, 1974).
[10] John Burnett, David Vincent, and David Mayall, eds., *The Autobiography of the Working Class: An Annotated, Critical Bibliography*, Vol. I: 1790-1900 (New York: New York University Press, 1984).
[11] James Hinton, *The Mass Observers: A History 1937-1949* (Oxford: Oxford University Press, 2013).

Harrisson recruited volunteers and trained them to be observers of the residents of the town of Bolton. They noted in copious detail what they saw and heard working-class people do and say. Examples of their work were incorporated in Chapters 2 and 3 on religious instruction and science curricula. Worktown was something of an anthropological survey of the industrial working-class of what Clifford Gertz would later term "thick description."[12] Indeed, thick description, Geertz's ethnographical tool for elucidating seemingly distant cultures and practices is what appears below in the accounts of working-class women who reflected on their educational experience, with particular emphasis given to the impact of domestic instruction on their lives. This emphasis is intentional given the contention of this research that there was a moral imperative to train girls in domesticity to prepare them for their future roles in reproducing the social and biological status quo of British society.

Furthermore, this bias follows the original intent of the Longley papers, as well as the reality life for most girls who had obligations in the familial home. In this regard respondents to Longley's appeal self-selected to produce autobiographical writing about domestic subjects and their elementary education. Interestingly, the responses Ms. Longley collected are very similar in character and form to the longer autobiographies held at Brunel Library in the Burnett Archive. The data from Mass Observation worked to quantify aspects of lived experience that could be observed by informants, and education within the town of Bolton was a topic that received its due examination. As such, the aim of Mass Observation was to analyze working-class life and the role and efficacy of education within that production. Taken together, these source bases, all created at different times, offer a glimpse of the impact of gender differentiated and classed

[12] Clifford Geertz, *The Interpretation of Cultures: Selected Essays*. (New York: Basic Books, 1970), 3-30.

education had on the girls raised within it where secondary, academic education was reserved for the fortunate few.

Recollections of General Education

For Ms. Longley, her interest in education was shaped by her own experience in English elementary schools, and her continuing education as an adult. In a letter to Mrs. Bradbury she explained:

> I am 75 years old, and was educated at an elementary school, which I left in 1930 at the age of 14. During the war [WWII] I studied for my [matriculation exam] through a correspondence college and in 1945 was given a place at Goldsmiths' College, University of London, to be trained as an infant teacher. Since leaving college I seem to be unable to stop myself from studying, despite being married and working full-time.[13]

The following year, Ms. Longley corresponded with Mrs. Bradbury again relating "I feel very strongly that the experiences of our generation, particularly those of women should be written down now because we are a part of an important section of history and if our accounts are not collected, it will be too late."[14]

Among Mrs. Longley's papers was her original, full length questionnaire which she submitted in order to receive permission to conduct human research for her dissertation. At 56 questions long, it covered vital information such as the type of school the respondent attended, whether it was a mixed or single gender school, what were the respondents' parents' occupations, and what sorts of jobs local girls took, but most significantly, it asked a range of questions on domestic science subjects. In the survey, domestic subjects were split into cookery, laundry, sewing and embroidery, housewifery, and childcare. Beyond details of the types of facilities schools had for these subjects, Longley was interested in where the respondent learned

[13] Lesley Longley, Letter to Mrs. Bradbury, January 28, 1991. Papers of Lesley Longley, LL/1/1, 0938. Newsam.
[14] Lesley Longley, Letter to Mrs. Bradbury, May 2, 1992. Papers of Lesley Longley, LL/1/1, 0937, Newsam.

the majority of the subject – at home or at school, whether or not the course at school was useful to the respondent in her later life, and if there were subjects she might have preferred learning had there been the opportunity.[15]

While it is not clear how much Mrs. Longley edited down her survey once she had advertised for women willing to answer it from the archival records, what is clear is that her final question "Is there anything else about your schooldays would you like to tell me?"[16] generated the most responses. The majority of Longley's research was found in the dozens of letters her respondents sent her regarding seeing her advertisement in either *Yours* or *The Guardian* and requesting a survey or adding on to what the survey asked. The letters contain brief autobiographies of the several women who wanted to participate in Mrs. Longley's survey. For example, Miss C.M. Hall wrote

> I started school at the age of 4 yrs. in Sept. 1927, attending the local Primary/Junior school …At the age of 11yrs I sat the Examination (the 11 plus) and won a Scholarship to Grammar School. I actually registered at the local Grammar School, but unfortunately, my father lost his job and finances did not allow for me to take up my scholarship. I then went on to the Senior School, a large red brick Victorian building. …On the whole, we received a good grounding in the three R's, but I felt there was little opportunity for those of us who had won Grammar School Scholarships in taking advanced subjects. English was my favourite subject, and I especially loved the poetry we read…and this has stayed with me in my adult years…In later years, when I became a Secretary, I realized that we had received a good grounding in English, though I always felt somewhat frustrated that I could not take more advanced subjects. I took early retirement, and at the age of 59, I attended an English course at my local college. I passed with an 'A' grade… I feel very sad when I see young people wasting their opportunities at school, and only wish that I had had their opportunities for advanced education. I would have loved to have gone to University.[17]

This letter is significant for several reasons. First it reflects the experience of millions of British girls who were not allowed to pursue secondary or post-secondary education between 1902 and

[15] Lesley Longley, Current Research in Britain Form 140-ED, with proposed survey attached. 1991. Papers of Lesley Longley, LL/1/2, 0817-0821 Newsam.
[16] Lesley Longley, Survey Question 56, 4. 1991. Papers of Lesley Longley, LL/1/2, 0821, Newsam.
[17] C.M. Hall, Letter to Lesley Longley, n.d. Papers of Lesley Longley, LL/1/2, 0822-0823. Newsam.

1944 because secondary education was not universal, nor in most cases wholly free, even with a scholarship to cover tuition fees. In many instances, like Miss Hall's, it was not because her parents did not want her educated, but timing and circumstance that prevented a daughter being educated to a higher standard due to cost. Given the timeline of her letter, Miss Hall sat for her scholarship exam in 1933 or 1934, during the Depression, a period when so many British men were out of work. While a scholarship might cover tuition, the additional cost for books, uniforms and transit fares was left to the parents to pay.[18] An outlay of 2 or 3 shillings while a father was out of work was unrealistic when the basic necessities of lodging and meals had to be considered first.

Second, Miss Hall discussed more about her school days than about domestic subjects which is what Mrs. Longley had solicited. Miss Hall's letter gives a glimpse of her education and of her adult life. Much like Longley, Hall was keenly interested in learning, and as an elderly woman, went back to school. Miss Hall found she had a better foundation in English than young people in the 1980s.[19] And she was angry that they did not value their education because she never had the opportunity to pursue hers in the 1930s. Hers is certainly a bittersweet experience. But her story is, sadly, not unique of working-class women in 20th century Britain, even if the educational aspirations of working-class women are little studied in British social history. Historian Jonathan Rose has written a masterwork on the autodidact tradition of working-class men who pursed further education through night courses at Mechanics Institutes or Workers' Education Associations in the late 19th and early 20th centuries.[20] We know less about what women did because, traditionally, their adult lives were spent in the home, not in the political

[18] A.W. Gorick Letter to Lesley Longley, 1993. Papers of Lesley Longley, LL/1/2, 0825. Newsam.
[19] C.M. Hall Letter to Lesley Longley, Ibid.
[20] Jonathan Rose, *The Intellectual Life of the British Working Classes* (New Haven, CT: Yale University Press, 2010).

sphere.[21] However autobiographical letters or full autobiographies held in archives do begin to fill in the dreams and aspirations of working-class women who returned to education in adulthood or who supported secondary and college education for their children and grandchildren. Working-class men were not the only people who desired to improve themselves by pursing continued education.

Finally, Miss Hall's words reveal a glimpse of the complexity of life for women in 20th century Britain. Countless are the stories of women who sacrificed their education, their childhood, to the service of their families through difficult times. Like Miss Hall, not all women married, and they had to work to provide for their own basic needs, a fact that would introduce more strain into women's lives. Conversely, Miss Hall's experience alludes to the job security she found as a secretary, and that she was able to work in a stable position in order to take early retirement. The economics of women's work outside the home had improved to allow her relative independence. However, the fact that she remained unmarried, is likely the only reason she was able to pursue a career for the whole of her adult life. While educational opportunity was limited, Miss Hall could make do in life, but her ultimate point was that she should not have had to do without further education. Her interior life might have been much richer, and the loss of opportunity stuck with her throughout her life.

Certainly, another bar to girls receiving secondary education was the prevalent gender bias of the time. Another respondent, A. Winifred Gorick, who was born in 1912, discussed how her father reacted when she won a scholarship to a private girl's school in 1923. "I was offered a place at the Henrietta Barnett School in the Hampstead Garden Suburb… I remember that my father was not too keen that I should take up the scholarship (not being a boy the reason!!). [sic.]

[21] Roberts, *A Woman's Place,* and Roberts, *Women and Families*.

But after pressure by a senior WOMAN teacher, he gave in…"[22] Another woman, whose identity is unknown, wrote to Longley, discussing her work as a pupil teacher and then as an uncertificated teacher which was common prior to 1918. She had the benefit of education to 18 years of age, but sadly could not afford to attend a Teachers Training College to earn a teaching certificate. She reflected, "Your remarks regarding the type of education given to girls interested me. How often have I been told – it's no use educating girls, they get married as soon as they can – how frustrated I used to feel."[23]

Moreover, girls who got an education, and did follow a profession, like teaching, were not allowed to work after marriage. Eleanor Rickman wrote to Longley relating her mother's experience as a teacher in Glasgow that upon marriage, it was the policy of the "Lanarkshire Education Authorities…[not to] employ married women" as teachers. Only during WWII was her mother allowed to resume teaching as a married woman.[24] The scarcity of men following WWI had an impact on a young teacher's ability to marry. Dorothy M. Hutchinson related that "I loved all three of the teachers I had" in elementary school. "They had little prospect of marriage following the slaughter of the recent war, and our successes were their fulfillment."[25] In her autobiography, "All So Long Ago," Elizabeth Rignall, a teacher, wrote of how she fell in love with the headmaster of her school in Kensington. She recounted that it took four years for each party to become aware of their mutual affection. But a union was not to be. "In those days under the old London County Council if a woman teacher married, she had to leave the service. As both Bob and I had heavy commitments to our respective families we could not possibly have

[22] A. Winifred Gorick, Letter to Lesley Longley, 0825.
[23] Lesley Longley excerpt of letter sent in response to her survey. N.d. "pupil teaching." Papers of Lesley Longley, LL/1/2, 0837. Newsam.
[24] Eleanor Rickman, Letter to Lesley Longley, January 27, 1992. Papers of Lesley Longley, LL/1/1, 0961-0962. Newsam.
[25] Dorothy M. Hutchinson, Letter to Lesley Longley, May 29, 1990. Papers of Lesley Longley, LL/1/1, 0906, Newsam.

lived on his meagre salary alone; so marriage was out of the question." Only "six years later cancer killed him."[26] For many reasons, women like Rignall felt damned by society if they were perceived as too educated to perform their duty as homemakers, but equally frustrated by the lack of economic and social opportunity following school life.

Winifred Fitzmaurice expressed that at the time, "the parental pressure was for the boys to have the education," considering that they did need to be trained for a specific trade to earn a living.[27] The logic of sexual bias against educating women as they would not be primary breadwinners, backfired as many families were headed by widowed women following WWI or by other tragic circumstance, or due to mass unemployment which was the case during the 1920s and 1930s. As a result, there were not many places a woman could turn to for employment apart from teaching, nursing, office work, shop work, domestic service or factory labor. Often overlooked is the pivotal role of women's labor in outwork and piece work whether it be making match boxes, sewing, or taking on laundry to supplement the family income, especially if the husband was absent or unemployed.[28]

Recollections of Needlework Instruction

The first priority of British girl's domestic education was needlework. All the respondents of Longley's survey mention needlework as the first, and sometimes most hated, of the domestic subjects which they were taught between the ages of 7 and 11. One respondent to Longley's survey wrote which they seemed to spend much time in needlework, as many as two

[26] Elizabeth Rignall, "All So Long Ago." 1-586, 2095. Burnett.
[27] Winifred Fitzmaurice, Letter to Lesley Longley, February 22, 1992. Papers of Lesley Longley, LL/1/1, 0995. Newsam.
[28] See Burnett, *Destiny Obscure*.; Gareth Stedman Jones, *Outcast London: A Study in the Relationship between Classes in Victorian Society* (Oxford: Oxford University Press, 1971).; Roberts, *A Woman's Place: An Oral History of Working-Class Women 1890-1940*.; Ellen Ross, *Love and Toil: Motherhood in Outcast London 1870-1918* (Oxford: Oxford University Press, 1993).

full afternoons per week. She reflected that most of the items she made were utilitarian, and the needlework was practical, like making buttonholes or running seams.[29] Similarly, Margery Dineen wrote of her experiences, that our "needlework lesson was a happy time for me, we always made underwear garments…We learned buttonholes and smocking and gathers had to be 'stroked,' [sic] that is a needle passed down between the gathers to make them even and tidy, a 'dreary' [sic] job."[30] Another woman recalled "At my elementary school, before I was ten, we learned plain stitches-tacking, hemming, back-stitch, French seams, patching, [and] darning." She wrote "at Christmas time the school would hold a doll-dressing competition. We could buy lovely little dolls in Woolworths and knit vests, pants, jumpers, caps, etc for them." Later in grammar school, she stated "the first garment I made was a pair of cotton knickers, trimmed with lace. It was an exercise to practice small neat stitches and make correct seams."[31] Eileen Ackroyd recalled that in her early needlework class at Salt Girl's High School that they began by "making small bags which were a sort of sampler, using basic stitches in wool and different darning methods as decoration. This was useful in the days when woolen socks and stockings were always coming into holes."[32] However, Mrs. Ackroyd concluded that she "was not very successful with the bit of sewing we did in this class."[33]

But for some girls, the teacher's insistence on neat work was a bane on her school days. One woman wrote "the teacher who took the sewing class was very strict and got very cross with girls who couldn't do nice stitches as we started off on hand sewing. I remember one girl being sent over to my desk to see my small neat stitches."[34] Dorothy Barton told Longley that the

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[29] Anonymous response to Longley, LL/1/2, 0851. Newsam.
[30] Margery Dineen, Letter to Lesley Longley, n.d. LL/1/2, 0869. Newsam.
[31] Anonymous response to Lesley Longley, n.d. LL/1/2, 0870. Newsam.
[32] Eileen Ackroyd, Letter to Lesley Longley, n.d. LL/1/2, 0873. Newsam.
[33] Ibid.
[34] Anonymous response to Lesley Longley, n.d. LL/1/2, 0871. Newsam.

"sewing classes at school…were not all that popular, as they often meant sewing long hems by hand." She said "any uneven stitches had to be pulled out and re-done with the same cotton, so some girls who were really bad sewers ended up with hems in cotton [thread] so dirty it looked black against the white cotton cloth. …We all had to wear thimbles on our right hands, and each stitch had to be the same size, which was not very easy to do, and all the sewing teachers I ever knew were absolutely ruthless about making girls unpick their work! I dislike hand sewing even today, and use a sewing machine if I possibly can."[35] The strain of a demanding sewing mistress was anxiety inducing for poor students. One woman recalled that she

> suffered from 'sweaty hands' [sic] so all my work was grubby before I got very far. I detested needlework days, and tried all sorts of ways to escape. I remember on one occasion tying a bandage around the index finger of my right hand so that I couldn't sew, but the teacher made me take it off. Escape from needlework was the one bright side to an accident I sustained to my left hand. For a long time, I had my hand in a sling, and then a protective stall. The teacher was very kind and allowed me to browse through her copies of 'The Children's Encyclopedia' which my parents could not afford to buy. I was in my element.[36]

This woman's recollection not only reveals how she disliked needlework sessions, but how starved she was for more traditional education and exposure to books. Like so many others raised in working-class homes, she did not have access to books like *The Children's Encyclopedia* and was far more entranced with expanding her intellectual horizons than the practical subjects of domestic science. Her experience stands in contrast to Margaret Cunningham, who was the daughter of an Anglican clergyman, born in 1900. Her autobiography, "End of Exploring" is rife with mentions of the books her parents read to her and those that her governess taught in school sessions, including *The Children's Encyclopedia*. Miss Cunningham wrote, "my reading widened. I had always read a good deal. Mostly children's books at that date … at seven years

[35] Dorothy Barton, Letter to Lesley Longley, n.d. LL/1/2, 0875. Newsam.
[36] Anonymous response to Longley, LL/1/2, 0851. Newsam.

old."[37] Around the time that she was writing her autobiography in 1976, Miss Cunningham, who was an Oxford educated teacher, shared "recently, a past student of mine, a self-educated lover of books told me how privileged I was to have been brought up in a world of books. In his home, he said, there had been no literature, but an occasional missionary magazine which his mother brought home from Chapel. I did not think much of it at the time but now, just remembering all these books of my childhood has made me realize how rich a world they gave me."[38] Her student, like so many did not have opportunity even in their elementary school educations.

One salve that eased the tedium and strain of the needlework class for many girls was the opportunity to have a turn at reading while the class worked. One woman wrote to Longley that "I do remember with pleasure that we took it in turns to read stories to the class as they sewed. Especially I remember books about Anne of Green Gables."[39] Again, Margery Dineen recalled "we had a 'cotton monitor' who gave out the coloured threads, and to keep our concentration, one of us would read aloud an exciting story. One I will always remember [is] 'Dorothy Vernon of Haddon Hall.'"[40] This example shows that in some ways, reading and literature were worked into the domestic science curriculum and offset the rigors and boredom that some felt the subject of needlework inspired.

A further indignation some girls faced during needlework class was the swift reprimand of the teacher if they were caught sewing with their left hand. Doris Eke recalled that "it was heaven help the girls who were left-handed, there were slaps and tears, it seemed it was [the] teachers duty to make sure every child used the right hand."[41] But despite this memory, Mrs. Eke

[37] Margaret Cunningham, "End of Exploring," 4-124, 2276. Burnett.
[38] Ibid., 2281.
[39] Anonymous response to Lesley Longley, n.d. LL/1/2, 0870. Newsam.
[40] Margery Dineen, Letter to Lesley Longley, n.d. LL/1/2, 0869. Newsam.
[41] Doris Eke, Letter to Lesley Longley, n.d. LL/1/2, 0855. Newsam.

felt that her education in practical subjects did teach her "useful things" which she still fell back on in later life.[42] Similarly, Kathleen Perry reflected on one of Longley's questions on the usefulness of the skills she learned in needlework. "My mother was never ever a needlewoman, and she mended reluctantly because it was a necessity to do so—I hardly learnt to sew from my mother. I have used what I was taught at school."[43] Mrs. Perry recalled the changing times since her school days and said "now, there is no real need to know too much about sewing and needlework…Clothes are made to last or throw away…it is surprising…it is not how the subject was treated then."[44]

Recollections of Laundry Instruction

As girls entered their early teens in either senior elementary schools or secondary schools, they received training in laundry. While doing laundry might seem straightforward to a modern observer, it was one of the most labor and time intensive chores of a working-class woman's week. Two working-class autobiographies illustrate the weekly routine women performed to wash and press their laundry. Wilhemina Tobias' "Childhood Memories," provides vivid detail of the labor involved:

> On washing day, usually Monday, wet or fine, the whole street reverberated from end to end with the steady thump, thump of 'poss sticks' (3-legged wooden things with cross wise handles) [sic] in 'poss-tubs' filled with last week's dirty clothes and soap suds. No packets of detergents then so hand soap was grated into the hot water. After a good old 'possing' the 'whites' were boiled in the 'set pot,' a stone boiler in scullery or wash house underneath which was stuffed coal, old boots, wood, etc. to keep the fire going. The wet clothes were then passed through the mangle, a big iron contraption with heavy wood rollers and a wheel on the side with a handle before being hung out on clothes lines (rope) [sic] slung across the back lanes from hooks on the walls. They were then propped high in the air with long wooden clothes props…Tuesday was universal Ironing day. My mother would put her heavy iron into the red heart of the fire to heat, take it out, using a thick cloth iron-holder, spit on it and if it sizzled it was cleaned on a sheet of emery paper

[42] Ibid., 0856.
[43] Kathleen Perry, Letter to Lesley Longley, n.d. LL/1/2, 0943. Newsam.
[44] Ibid., 0944.

> ready for the mountainous piles of clothes already dampened and starched. Two irons were used, one in the fire, and one in use. It was always a mystery to me how not one thing out of those piles of frilled petticoats, pinafores, shirts, etc., was ever singed. The collars of men's shirts were separate, a clean collar every day if not a shirt; they were stiffly starched and ironed without one single crease. The men would have refused to wear them otherwise.[45]

Molly Keen also included in her autobiography, "Childhood Memories 1903 to 1921," the labor her mother put in to do household laundry in suburban London. "One wonders how a mother coped in those days without modern conveniences and aids in the home. Washing and ironing for a family in summer-time included the girls lace hats with three flounces into the brim of the hats which required starching and ironing, pretty cotton dresses, lace petticoats also white cotton laced pinafores which needed to be goffered with goffering irons. Large articles like sheets would be sent out to be laundered but the majority of our clothes were washed at home…A charwoman came in once a week, but the daily accumulation of work must have been enormous."[46]

From these two accounts alone, it is evident how technical and specialized skill in laundry was for working-class women. In view of the time, effort, and skill involved and a work task that spread across two days of the week, it is evident that LEAs thought it was necessary to provide working-class girls with practical training in laundering prior to leaving school. In the early 20th century, educators assumed such girls would go into domestic service for work following their school life.[47] As such, laundry was given a far more scientific, rather than aesthetic bent, as opposed to needlework courses. Laundry work was rationalized and given discrete scientific methods, with a basis of chemistry and physics that was taught in connection

[45] Wilhelmina Tobias, "Childhood Memories," 2-766, 2126-2128. Burnett.
[46] Molly Keen, "Childhood Memories 1903 to 1921," n.d. 2-449. Burnett.
[47] Anonymous letter to Lesley Longley, n.d. LL/1/2, 0852. Newsam. Alludes to presumption that girls go into domestic service and many of her peers did.

with the use of soaps and chemicals, heat, and air flow. Laundry work also required purpose-built rooms or buildings separate from the school where ovens, sinks, large tables, drying racks, and irons were available for the girls to use. Much as boys' science labs needed to be properly outfitted, LEAs felt that they were giving equal provision for girls as more and more schools built dedicated training centers to allow for practical experience in domestic science.

In an autobiographical letter, solicited in the press by historian John Burnett, D.M. Ponton recalled her school days and the domestic subjects she was taught. "We had a fine domestic training Center attached to the school where we received training in Cookery …housewifery… and laundry…where we learnt to wash, starch, iron,…and 'goffer.'"[48] Elieen Ackroyd, a respondent of Longley, remembered that her laundry lessons were part of the broader "housecraft" curriculum that "started with laundering, garments from home, then cleaning."[49] Doris Eke shared with Longley her experience in Laundry lessons.

> One afternoon a week [her class was] sent to different school in Newington Green, [London]. We took an article to wash, [where the] teacher supervised the hot water, [as] I am sure there wasn't any on tap. Articles were taken to the playground to dry and then we ironed them. It was a round stove…it must have been heated by gas inside with the irons all around. We had to take a holder and take one off to test it in the approved manner, spit on your finger and slap it on, if it was hot enough, it hissed. One time we were asked to take something embroidered so that we could iron it on the wrong side to make it stand out nicely.[50]

Similarly, Dorothy Barton detailed the purpose-built facility her school had for teaching domestic science subjects. She wrote that in Carshalton, at the age of 12, her school "had a special building attached to it for [cookery, laundry, and housewifery] classes. Laundry and cookery took place in the two rooms on the ground floor, while the upper floor was set out as a

[48] D.M. Ponton, "Autobiographical Letter," 2-629, 2011. Burnett.
[49] Eileen Ackroyd, Letter to Lesley Longley, n.d. LL/1/2, 0873. Newsam.
[50] Doris Eke, Letter to Lesley Longley, n.d. LL/1/2, 0855-0856. Newsam.

fully furnished flat."[51] During this period, as mentioned in Chapter 4, it was not uncommon for schools to have their own equipped flats or to have a domestic science center with a similar set-up to teach girls how to keep house. Barton continued by describing the laundry classroom and procedures:

> The laundry room was equipped with sinks along one wall, with hot water taps over them, and in the middle of the room was a large black pot-bellied iron stove, which burned coal. Around the outside of the stove were ledges where the old flat-irons were stood on end with their base against the stove to get hot. First we washed our garments in the sinks full of soapy water, rinsed them, first with clear water and then with 'blue' [sic] water if the garments were white, and after this they were starched if necessary. All this having been done, the washed articles were then put through a heavy iron framed mangle with huge wooden rollers, after which they were hung on racks hanging from the ceiling over the stove. While we waited for the clothes to dry enough to iron, we sat at tables at one end of the room to write out in detail what we had just done…We were allowed to take things from home to be washed and ironed, as long as they were reasonably small, sheets and such like were not accepted! [sic][52]

These reflections are significant because they detail the processes involved in learning to do laundry and the multiple steps involved. It also allows one to understand the scope of the facilities of the domestic subjects' centers to clarify the significant investment communities put into their construction. Though they were not equipped science labs that boys' schools had, to LEAs, they were no less sophisticated.

Eva Shilton recorded her school memories in her autobiography. Like Eke and Barton, Shilton also attended a school that had a domestic science training center. A part of her course work included laundry. Her class rotated out of learning to clean in the school flat, "spending the whole day washing and ironing. <u>IT WAS HORRIBLE</u>. [sic] I hated the smell, the steam, and everything about this wash house, any way I had enough washing at home. The grumbling at home, as every week I wanted either a towel, or a pillowcase, and later something woolen. My

[51] Dorothy Barton, Letter to Lesley Longley, n.d. LL/1/2, 0875. Newsam.
[52] Ibid.

mother was very proud of her washing, and it was a fact that the things that came back from the school wash house were dingier than before they went…One week we were told to bring our fathers old [sic] woolen socks to wash. My mother could hardly believe her ears, imagine a pair of socks that a man had been to work in all week. Because the average home clothes were changed once a week, for one thing very few people had any spare clothes, it was hard enough to buy, one to wear one to wash. The smell of those old socks nearly killed us, we walked about the laundry holding our noses."[53] Expressing palpable relief that her schooling was done, Francis Hayter wrote Mrs. Longley that "I'm glad we no longer have to 'blue' and 'starch' things, or use a flat iron."[54]

These women's memories of laundry instruction emphasize the skill and multitasking that was required of them to perform their tasks well. Far from straightforward, the elements of performing the washing, starching, drying and ironing of clothes using heavy frames and equipment was a daunting feat. Though there is some tension among women whether or not their education was more useful than their mother's example, they all agree that the task was labor and time intensive. Given their accounts, it is easier to understand why half and full class days were given over to performing this skill. It also makes the educationalist's views easier to understand with such detailed accounts as have been included above. The added context provides explanation to the timetables set out in Chapters 3 and 4 for girls' curriculum.

In contrast, Grace Dix wrote that at her school, "no cookery or housewifery lessons were done. I learnt all mine at home."[55] It is possible that her school was not equipped with the facilities to expand domestic science to these two subjects. While the development of washing

[53] Eva Shilton, "School and Family Life in Coventry 1913-1921." 2-706, 2216-2217. Burnett.
[54] Francis Hayter, Letter to Lesley Longley, n.d. LL/1/1, 1013-1014. Newsam.
[55] Grace Dix, Letter to Lesley Longley, May 7, 1990. LL/1/1, 0883. Newsam.

machines and dryers and the mass production of cheap and durable clothing did ultimately cut down on the time and labor involved in doing laundry, a key element that Dix struck on for Longley's survey was whether or not a girl got more domestic training at home or at school. For Dix a combination of lack of local provision for facilities to practice certain domestic subjects and home necessity operated to create this division of where skills were learned. Especially in more rural areas, a single training center might be located in the central market town and involved special arrangements to attend. For C.M. Hall, this type travel for education was a reality. Her senior school was "a large red brick Victorian Building…neither did it possess a Science Room, but [we] had to walk to another school, about 15 minutes away. We attended this school for one whole week. In the morning we had science lessons, and in the afternoon, art lessons."[56] In reply to Longley, Joan Haughton wrote that "coming from a working-class family, I learnt all the basic tasks at home, and so did my friends."[57] In other cases, depending on which decade of the early 20th century she attended school, a girl did without such formal training. Finally, for girls from families with some financial security, they could take specific classes for a fee at a continuation school or a secondary school to learn essential skills.[58]

Recollections of Cookery Instruction

The subject of cookery was more universally taught at senior elementary schools in Britain. The scope and breadth of cookery depended again on the location of the school, the provision for specially equipped rooms, and if schools were fee charging or not, as outlined in Chapter 4. At one end of the spectrum, schools focused on practicality and the preparation of

[56] C.M. Hall Letter to Lesley Longley n.d. LL/1/2, 0822. Newsam.
[57] Joan Haughton, Letter to Lesley Longley, April 9, 1990. LL/1/1, 0880. Newsam.
[58] See Girls Public Day School Trust syllabi – Utilized in Chapter 3. Papers of the Girls Public Day School Trust, GDS/18/12/1. Newsam.

basic dishes that a wife would likely cook for her family. On the other end, certain schools taught girls how to cook elaborate dishes with more expensive ingredients with more intensive skill and emphasis on technique and presentation. These advanced skills were essential for girls going into domestic service. Cookery was considered more scientific as it dealt with basic chemistry and physics where measurement of ingredients was precise and temperature was taught for its effects on the physical properties of food as well as for thorough cooking. One respondent shared the routine of her cookery classes with Longley:

> I used to go to cookery classes once a week, we had to join up with another school for this lesson, it was about half-an-hour's walk each way which made for quite a long day. We made scones, cakes, pastry and things like fish cakes, rissoles, and shepherd's pie and lots of different soups. *Some weeks we would use the school's supply and then we could buy whatever we had made.*[59] After we had finished cooking we used to have to clean up and scrub all the table tops and wash the floor. We were always told this was very good training for when we had our own homes.[60]

Similarly, at her training center, Doris Eke recalled that

> the morning session was cooking for a family of four on five shillings a day, breakfast was always porridge and dinner was nearly [always] stews or meat pudding. We stood in rows along a table each with a rolling pin and a board. [There] must have been a clean pinny [pinafore] but no mention was ever made of washing hands. [The] teacher supervised the oven and placing of pots and pans on the top. We worked two together, peeled and scraped vegetables and made proper gravy, always rice or semolina pudding for afters. Tea was bread and margarine with homemade jam…There were a few jam making sessions but teacher did it while we watched. The dinner was given to a few of the children whose fathers had been killed in the war [WWI], [as there was] no such thing as school dinners in those days. The afternoon session was mainly pastry or cake making. We weighed our own ingredients, rolled our own pastry carefully…We learnt to scrub the utensils and leave the kitchen clean.[61]

These two excerpts provide valuable information on the scope of cookery assignments, from simple dishes like soups and shepherd's pie to puddings and jams which required more skill.

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[59] Chapter 3 discusses whether schools provided the ingredients for cookery classes or if they made girls provide their own materials for the class.
[60] Anonymous letter to Lesley Longley, n.d. LL/1/2, 0849. Newsam.
[61] Doris Eke, Letter to Lesley Longley, n.d. LL/1/2, 0855-0856. Newsam.

They also reflect the community nature of cookery classes, that they more than other subjects, benefited not only the girls' but local families. The first relates that meals could be purchased to take home to the family, while Ms. Eke spoke of meals being donated to needy families. Perhaps more than any other course, cookery brought out class alliances rather than divisions and a consciousness of common cause.[62]

Another respondent of Longley, Mrs. Bradbury stated that at her elementary school, "we made bread the same day we did laundry. At this time there were no school dinners, and as we got a little older we cooked dinner for some of the teaching staff, learning how to set [the] table properly, etc."[63] Similarly, Margery Dineen also discussed her experience in cookery classes at her school in southwest London during WWI. She wrote that she enjoyed cookery class and that her new school had "a large kitchen with gas stoves and a large oven heated by a fire…As it was wartime all ingredients were carefully weighed and measured," Dineen had vague memories of "learning to cook meat," and recalled how to cook "a few sausages and some herrings which we learned to open and clean."[64] In a comical tale, Dorothy Barton related what happened when she brought cooking home from school. "I once made a rice pudding which I took home to give to my father for his tea, and stood over while he ate every little bit of it, which he said was lovely. It wasn't until years later that he told me I had forgotten to put any sugar in it!"[65]

In comparison, a woman with a grammar school education told Mrs. Longley about the more academic aspects of cookery and end of term exams. She wrote that

> there were about 30 girls in each form but…that were divided into two groups for our cookery class. I know we worked at tables – three girls to each. I think we shared two gas ovens. We wore white overalls…We had no cookery textbooks. We had to copy

[62] See E.P. Thompson, *The Making of the English Working Class* (New York: Vintage Books, 1963), for a discussion on class consciousness and class formation in England in the 18th and 19th centuries.
[63] Mrs. Bradbury, Letter to Lesley Longley, n.d. LL/1/2, 0859. Newsam.
[64] Margery Dineen, Letter to Lesley Longley, n.d. LL/1/2, 0869. Newsam.
[65] Dorothy Barton, Letter to Lesley Longley, n.d. LL/1/2, 0875. Newsam.

> everything into our notebooks from the blackboard or from dictation. We had a double lesson, which… [lasted] for an hour. Our teacher was very precise and efficient. She needed to be because apart from copying about three pages of notes into our books, we had actually to cook the pancakes, omelettes, etc. and carry them proudly home for praise or criticism. I am sure I remember being tested in cookery at the end of term examinations. Each of us had a different dish to make. We were given a list of ingredients but had to remember what to do with them.[66]

Margery Dineen also recalled exams, stating that "for exam time we picked a menu out of a box and prepared to produce it. Once I had a suet pudding which meant I was still there at the end after the longer cooking. I turned out a 'perfect pud.'"[67] Only one respondent of Longley discussed a scientific treatment of cooking taught to her in school. At the John Roan Foundation School in Greenwich, this woman received a high-level education thanks to her connection to the Naval College as her grandfather had served in the Royal Navy and was a lecturer there. She wrote that:

> my former mistress taught both General and Domestic Science throughout the girls-only school and connected all the bits-and-bobs of physics and chemistry with domestic science. For example, if pastry dough is not kept in a cool room before putting in the oven to bake, the flour particles will disintegrate, and the pastry will not be light. …[Further] using one's hands rather than wooden or metal mixing tools was demonstrated and then we did it! [sic] …The hand mixed pie or pudding was of better texture to the palate.[68]

This reply is informative because it reflects the class divide in British education. Girls who could afford to attend secondary schools, or obtain scholarships got a different type of education than elementary school girls. Scientific principles were taught, and this corresponds to data discussed in Chapter 4 regarding the bifurcation of the curriculum by class and by degree of detail taught. Interestingly, this woman's course exposed her to new methods in cookery that confirmed for her that old ways were best, in regard to mixing ingredients by hand.

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[66] Anonymous letter to Lesley Longley, n.d. LL/1/2, 0870. Newsam.
[67] Margery Dineen, Letter to Lesley Longley, n.d. LL/1/2, 0869. Newsam.
[68] Anonymous letter to Lesley Longley, n.d. LL/1/1, 0916-0917. Newsam.

However, another woman disagreed that cookery in her day had been scientific. Dorothy Hutchinson, who was a cook, and whose grandmother and mother had been cooks in domestic service, related that "when I was a cook, I didn't know anything about calories or vitamins, and people didn't seem to bother about diets. We didn't cook by science. We selected menus by common sense and cooked food that was appetizing and nutritive."[69] Scientific or not, Doris Eke felt that the practical lessons of thrift in cooking did aid her in later life. "…The cookery lessons when it came to managing on one shillings' worth of meat in the war years with one child under five…came in very useful."[70] In turn, these two accounts show that elementary cookery was far more practical and geared to the daily needs of a family, teaching girls management skills.

As with the needlework lessons, cookery drew a great many detractors who decried the lessons and time spent on them in school. Joan Haughton exclaimed that "our cookery lessons were terribly simple…I thought it was time-wasting and did not cater to mothers with big families. It was basically impractical."[71] Another woman was adamant that "the cookery was not very useful. I remember learning to make bread, which nobody would eat when I took it home. We made cakes, but my mother was a very good cake maker, so I could have learned just as easily from her. We also learned pastry making, and how to make Yorkshire pudding. We learned which were the cheapest cuts of meat to buy, but I can't remember cooking anything that was really useful."[72] Mrs. K. L. Perry elaborated on her experience in a grammar school "I did four years of Domestic Science. I can remember making cheese straws and puff pastry and other things like cakes, but nothing to do particularly with ordinary cooking. I have lamented in later years… I learnt more about food from my Mother. I used to talk to her whilst she was cooking

[69] Dorothy M. Hutchinson, letter to Lesley Longley, May 29, 1990. LL/1/1, 0902. Newsam.
[70] Doris Eke, Letter to Lesley Longley, February 2, 1992. LL/1/1, 0963-0964. Newsam.
[71] Joan Haughton, Letter to Lesley Longley, April 9, 1990. LL/1/2; LL/1/1, 0838, 0880. Newsam.
[72] Anonymous, Letter to Lesley Longley, n.d. LL/1/2, 0852. Newsam.

and watched what she did and she went to work also so I had quite a responsibility to stand in and do what she was unable to do."[73] These responses signal irony. The elementary schooled students were educated in the basics of cookery with no frills, yet the grammar school educated girls were only taught elaborate and decorative dishes, not practical cookery. The assumptions of educationalists regarding the respective needs of one class versus another clearly missed the mark for these women. Perhaps cookery could have been taught in progressive phases for both sets of students rather than one set of lessons for the poorer and another for the more affluent. Or more probable, educationalists thought each class had a different moral imperative with one needing more instruction in basic, yet nutritive cooking, and the other, social graces. Nonetheless, cookery was likely the most important domestic subject girls were taught.

Recollections of Housecraft Instruction

A closely allied subject often wrapped into the business of cooking was housecraft or housewifery. The goal of working-class girls' education in early 20th century Britain was that they should be equipped to run their own home upon marriage and teach thrift, Christian virtues, and decorum to their own children. Much of housewifery instruction dealt with care of the home, cleanliness, decoration, and in some instances, childcare and basic first-aid. Like cooking and laundry, housewifery courses had to be held in specialized training centers or purpose-built buildings to allow girls to practice the art of cleaning and keeping a sanitary house. Again, the aim would be to provide in the short term, a basis of experience to allow the girl to be successful as a maid in domestic service. The long-term view was to prepare the girl to be an efficient wife and homemaker.

[73] K. L. Perry, Letter to Lesley Longley, February 8, 1992, 0977. LL/1/1, Newsam.

A respondent of Longley's wrote that in her "final two years [of senior elementary school], we attended a center on one afternoon a week for housewifery…In the housewifery lessons everything was taught, either with the idea of us going into service (which many of my school mates did) or to become efficient housewives. We were taught a lot about dusting, polishing, the correct way to sweep, the correct way to scrub a kitchen table, cleaning brass, copper and silver, care of carpets, making beds etc. We also learned the correct way to wash wool. …we were not taught a thing about childcare, but we did learn a lot about hygiene. We learned the names of bones of the body, circulation of the blood, composition of the organs like the ear and the eye. We did learn how to cope with very simple illnesses, the common cold, tonsillitis, care of the teeth and things like that…We also learned first aid and did practical work in bandaging."[74] An important aspect of this experience was the child's exposure to human biology in relation to hygiene and health. This woman contrasted what she was taught with that of her brothers. She wrote "my brothers did not learn first-aid, but they did learn hygiene. Our hygiene of the body finished with the stomach, we learned about the digestion, but we did not learn how the waste products were disposed of – I imagine this was considered not a nice subject for girls."[75] While boys could be taught about bodily wastes, it was unsuitable for girls even though it was the natural byproduct of a healthy, functioning body, as well as the end route of digestion. This account also supports the limits of biology instruction of Edith Cooper's Science Scheme discussed in Chapters 3 and 5. Here science stood in abeyance to social standards of propriety in determining which facts were appropriate for girls to be taught in school.

In another school, Margery Dineen stated that what passed for housewifery was cleaning up after a cookery lesson. She wrote "we had to clean the cooker and scrub the tables the next

[74] Anonymous letter to Lesley Longley, n.d. LL/1/2, 0852. Newsam.
[75] Ibid.

day, and this was then called 'housewifery.' All our utensils were good quality and we certainly learned to look after them."[76] Joan Hansen also wrote of the tasks her school required during housewifery. "Housewifery lessons were washing and ironing, cleaning floors and tops with occasional fire drill."[77] Ms. Hansen's experience shows how in some schools, laundry was consolidated into housewifery as one of its key components. The responses of Longley's survey paint laundry as a central task in a mother's week of chores and was a key feature of housecraft. Eileen Ackroyd discussed the idiosyncrasies of her housecraft lessons at Salt Girls High School:

> Our housecraft lessons were mostly practical. We might write a few notes in class, but wrote essays about the work for homework. We started with laundering garments from home, then cleaning. Scrubbing the way of the grain, (but my father said that wore the table into grooves) [sic] sweeping before dusting etc. Once we had to clean school lavatories. One girl was very indignant…they were spotless before we started anyway.[78]

In a similar vein, Mary Kennett discussed her class, "then there was Housewifery on a different day. That was not so interesting, as so many girls had lessons in the flat, there was never any dust to find or any windows when needed cleaning, but we had to go through the motions! Just to say we had been!"[79] In Mrs. Kennett's and Mrs. Ackroyd's accounts housewifery classes seem to take on an air of a grand production or an industrial, mass-produced efficiency, such that so many girls went through the training centers that the act of cleaning the provided flat was obligatory rather than necessary and demonstrative. The training centers did cater to the societal decree that girls be trained to be effective home managers, but without the real challenge of cleaning spills or stains, how educationalists thought girls could be equipped to carry out all the tasks expected of them is uncertain.

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[76] Margery Dineen, Letter to Lesley Longley, n.d. LL/1/2, 0869. Newsam.
[77] Joan Hansen, Letter to Lesley Longley, n.d. LL/1/2, 0871. Newsam.
[78] Eileen Ackroyd, Letter to Lesley Longley, n.d. LL/1/2, 0873. Newsam.
[79] Mary Kennett, Letter to Lesley Longley, May 9, 1990. LL/1/1, 0909. Newsam.

At Carshalton School, Dorothy Barton discussed the flat where she took housewifery lessons. She stated that it was a "fully furnished flat, complete with a life size baby doll. During our housewifery lessons we had to clean the rooms, make the bed, and bath[e] the baby, including putting on nappies and dressing it etc. This was great fun, and everyone liked housewifery classes, but I am not sure that every school had this kind of purpose built equipment."[80] Similarly, Winifred Fitzmaurice shared a recollection of her aunt's school days as she was a few years older, and wrote Longley that the "domestic science she did at her senior school seemed to be much more prominent, that I was rather envious that they could go to school and play house, as it seemed to me."[81] Another woman wrote "for childcare the school had a big china doll which was treated and cared for like a real baby, being bathed and dressed, which I think was all good training for later on."[82] In general, several women had positive recollections of housewifery and saw the value and applicability to their future lives as wives and mothers, and the moral obligation that outcome presupposed.

Another Longley respondent, who discussed her sister's educational experiences, best relates the rigor of housewifery. She stated that "my sister also attended a housewifery course at Beulah which lasted every day for six weeks. Here they learned everything involving the day-to-day running of the house, including peeling potatoes, washing windows and more cookery such as baking bread. They also practiced the art of washing babies on a large jointed doll. She made notes at the time and tells me they had examinations."[83] A girl's class notebook from 1922-23 lays out a timetable for daily housewifery tasks.[84]

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[80] Dorothy Barton, Letter to Lesley Longley, n.d. LL/1/2, 0875. Newsam.
[81] Winifred Fitzmaurice, Letter to Lesley Longley, February 22,1992. LL/1/1, 0994-0995. Newsam.
[82] Anonymous, Letter to Lesley Longley, n.d. LL/1/2, 0842. Newsam.
[83] Anonymous, Letter to Lesley Longley, n.d. LL/1/2, 0846. Newsam.
[84] "The Daily Work of the House," Housewifery Extracts from a Girl's Notebook. Papers of Lesley Longley. LL/1/2. Newsam.

1. Rise early, wash and dress neatly.
2. Light fire, tidy kitchen.
3. Lay breakfast.
4. Wash and dress little children.
5. Have breakfast.
6. Wash up dishes
7. Send children to school.
8. Bath[e] baby
9. Prepare dinner.
10. Do daily work to bedrooms, stairs, sitting room and front door step.
11. Do special work for the day.
12. Have dinner
13. Wash up any dishes. Tidy Kitchen.
14. Take baby shopping.
15. Do ironing, needlework, etc.

The subject of housewifery was a serious subject where it could be taught with the proper depth a six-week long course could provide. A common thread to these accounts is the use of a baby doll to teach infant care. Much as Chapter 3 and 5 contend, girls learned about babies only after birth, related to their care and exercising mother love. None of these girls were likely taught sex education. To them, as Mrs. Fitzmaurice stated, it was like playing house. Perhaps that was the key to its spread and popularity, that it was performative of adult tasks without the high stakes of raising and feeding a child.

For other women, housecraft or housewifery was not included in the timetable at their smaller schools. For example, Mrs. Perry did not have much exposure to housewifery while in school. She wrote, "I never learnt housewifery from anyone except my mother…I hate doing it but it is so necessary to carry out hygiene for decent living. I am forced to recognize its value."[85] In addition, Grace Dix told that "there were no cookery or housewifery lessons [at her school]. I learnt all mine at home."[86]

[85] K. L. Perry, Letter to Lesley Longley, February 8, 1992. LL/1/1, 0978. Newsam.
[86] Grace Dix, Letter to Lesley Longley, May 7, 1990. LL/1/1, 0884. Newsam.

While some students received no training in housewifery, others like this respondent, got a double dose. This woman was not able to continue on to secondary school and had reached Form 7 by age 12. This meant she had to repeat had to keep taking the same series of courses each year until age 14. She wrote "I was very unlucky because being in the top class for two-and-a-half years I was given a second dose of housewifery which I loathed, and I felt very hard done by at having to attend this center to learn housework which I hated anyway. I don't think it was so much a dislike of housework as longing to do more academic subjects. I also felt that going into service was degrading."[87] This woman's recollections do much to temper the glee with which some students approached housecraft courses. This was a woman with academic ambitions and because of economic circumstance, she was not able to achieve what she had aspired to in school. Her last two years of formal schooling felt to her as if they were wasted on the paradigm of intensive domestic training rather than academic or intellectual subjects. She is only one of thousands of girls who was not able to continue to secondary school and did not get wider education than the basic curriculum as outlined in Chapter 3.

Margaret Cunningham, the Oxford educated teacher, wrote of the educational standard in her village of Cranleigh in the Edwardian era, "the average child leaving school at this date…could read and write a well spelt letter in good hand writing, all our maids could though it was only of comparatively recent years that these were universal accomplishments of the working classes."[88] The impression from Cunningham's autobiography is that those attainments were all that the working-class children needed to fit them for their station in life. But not all working-class girls were content as the former respondent was, to remain circumscribed in the world of domestic service or homemaking.

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[87] Anonymous, Letter to Lesley Longley, n.d. LL/1/2, 0852. Newsam.
[88] Margaret Cunningham, "End of Exploring." 4-124, 2285. Burnett.

To add insult to injury for working-class girls whose parents had little money to spare, very little of what they produced in needlework, embroidery, or cookery was free as detailed in Chapter 4. If a girl wanted to keep a garment she sewed, she had to buy it. In some cases, she had to supply her own materials as well. In discussing cookery classes, one woman wrote "Materials had to be provided from home, only things like salt, baking powder, and milk were supplied by the center."[89] Another had to alternate when goods were brought in, "Some weeks we would use the school's supply and then we could buy whatever we had made," she recalled.[90] She also had to supply her own wool for knitting in school, and then, again had to buy the finished product. Oftentimes, items like garments and school meals were not bought. These reflections indicate that some things went to waste or were used or consumed by teachers but not by pupils or needy local families. It seems a pity that a social bar to outdoor relief (charity) may have caused more harm than good and reinforced notions that poverty was a personal failure. As discussed in Chapter 4, thrift may have been a negative lesson in a period that saw so much devastation following WWI, the General Strike, the Great Depression, and the Blitz.

A Bitter Pill?

The inclusion of domestic science curricula in the majority of state-aided elementary and fee charging secondary schools in Britain, was itself a mark of class subservience for working-class girls. Margaret Cunningham, vicars' daughter, was raised in the lower middle class of professionals. Her father earned £300 on his marriage to her mother, and increased that to £900 by the time of her 10th birthday. For someone in the working-class, three hundred a year was an astronomical sum in 1900. Many working-class families subsisted on £50 a year or less.

[89] Anonymous letter to Lesley Longley, n.d. LL/1/2, 0852. Newsam.
[90] Anonymous letter to Lesley Longley, n.d. LL/1/2, 0849. Newsam.

Accordingly, Margaret was never given domestic training by her governess or in her boarding school. She wrote of her time at school from age 14, "I cannot remember anybody ever learning 'Domestic Science" – cookery and household care – it was presumed, I think, that would have servants to perform these tasks."[91] However, the aim of Cunningham's boarding education was not the academic life she pursued. She wrote that the "aim of the school was to produce gentlewomen of culture who would know how to take their place in 'society' and make… 'a beautiful marriage.' In those days some people would have called it a 'finishing school.'"[92] The intent of this sort of secondary education was to fit women to know their role and make polite companions to their future husbands. The lack of domestic instruction reflects this goal. However, for working-class girls, the emphasis on physical labor in their domestic science education was the mark of class distinction between common women and gentlewomen.

Several respondents to Longley's survey detailed how they were expected to behave in society despite working-class origins. Winifred Gorick wrote that, "behavior, even when away from school, was expected to be proper and correct," and that her dress was to be formal and tidy in public.[93] Another wrote that, "besides being strictly controlled, behavior had to be ladylike at all times. We were expected to behave in a ladylike manner and anything that could be considered tomboyish was frowned upon."[94] Joan Haughton sent Longley a copy of her "character" or reference that she received upon leaving school, and the school headmistress noted that she was "intelligent, quiet, refined, and should be very successful in her new work."[95] The moral imperative to possess a good character as an exhibition of feminine citizenship was a

[91] Margaret Cunningham, "End of Exploring," 4-124, 2229, 2284, 2287, 2229, 2316. Burnett.
[92] Margaret Cunningham, "End of Exploring," 4-124, 2300. Burnett.
[93] Winifred Gorick, Letter to Lesley Longley, n.d. LL/1/2, 0827. Newsam.
[94] Anonymous Letter to Lesley Longley, n.d. LL/1/2, 0854. Newsam.
[95] E. E. Ingles, Headmistress, Tripton's Senior Girls School, Dagenham, "Character for Joan Gusterson (Haughton)," December 23, 1938, Papers of Lesley Longley, LL/1/1, 0912. Newsam.

lesson that permeated the class divide. With this end in mind, some women bore resentment about the course of their education in not providing enough opportunity to break out of the working-class domestic ideal. One woman wrote that "I felt that education had done very little for me except to teach me servility, obedience, and never to query anything I was told. Had I attended a boys' school, or received a similar education to that given to my brothers, I feel certain I should have passed the scholarship at eleven, and would not have gone through life with an enormous 'chip' on my shoulder."[96]

Certainly, women like C. M. Hall aspired to go to university but were unable to due to economic and gendered social circumstance.[97] Winifred Gorick was another. While she was able to attend a secondary school and take a "General Schools' Certificate of the University of London," to continue to university, she wrote "in spite of the Scholarship awards I was not able to continue school."[98] A woman who worked as a pupil teacher was 18 when she learned that it "would be impossible for me to go to training college, as I had two brothers and two sisters who were younger than I, so I just had to make the best of things." She added, "looking back, I do not regret any of the disappointments I encountered, as I can now think that everything happened for a reason."[99] Similarly, Doris Eke stated that she enjoyed life "mainly because our schooling taught us to cope with life and get on with it, taking the ups with the downs."[100]

While some women were better able to cope with their disappointments at not having broader educational and social opportunity, others maintained solid resistance to the idea that the

[96] Anonymous Letter to Lesley Longley, n.d. LL/1/2, 0854. Newsam.
[97] C.M. Hall Letter to Lesley Longley n.d. LL/1/2, 0823. Newsam.
[98] Winifred Gorick, Letter to Lesley Longley, n.d. LL/1/2, 0825. Newsam.
[99] Anonymous, Letter to Lesley Longley, n.d. LL/1/2, 0837. Newsam.
[100] Doris Eke, Letter to Lesley Longley, February 2, 1992, LL/1/1, 0956. Newsam.

education they got was limiting in some way because of gender or class. Francis Hayter took a historical social view of the quality of education afforded to her during the 1930s.

> After the First World War there was mass unemployment, millions of one parent families (existing without social security.) [sic] Life was a matter of grim survival and simple living. No fancy dinner parties. No labour saving devices. Just simple cookery – no luxuries. Household chores were washing with Sunlight soap, water from a 'copper,' and a 'Dolly Board.' Blackleading fires, gas ovens (Tin baths). Washing Lino floors all of which were learnt at home. Most fatherless children were very capable as their Mother had to go out to work. [sic] Had these children won a scholarship their parent or parents could never have afforded the necessary extras, uniforms, books, etc. etc. Mine couldn't. Considering that most of my school companions were destined to work in Woolworths or low paid jobs, I think the lessons we received were sufficient to broaden or encourage the brightest to do their best…We were lucky."[101]

Ms. Hayter's letter shows a complex, but fiercely proud view of her education and life in the context of broader social and historical events prior to World War II, at which point, in 1944, secondary education became the right of all children in Britain. She understood struggle and privation. She rejected Longley's research question, which framed girls' education as keeping them down in society.[102] Hayter asserted that women of her generation had access to attend evening courses, as Longley had done.[103] She held a better-late-than-never viewpoint. Hayter made the claim that her education was better than what her grandmother had, a dame-school education in the days before compulsory education became fully enforced in 1891.[104] It is certainly commendable that she would not adopt a victim mindset.

Conclusion

But the larger view that Longley was after, and which concerns this research is the effect such an education had on a generation of women who because of their sex and social class were

[101] Francis Hayter, Letter to Lesley Longley, n.d. LL/1/1, 1008-1014. Newsam. (1008-1014)
[102] Letter by Lesley Longley to Winifred Fitzmaurice, February 16, 1992. LL/1/1, 1001. Newsam. (1001)
[103] Francis Hayter, Letter to Lesley Longley, n.d. LL/1/1, 1011. Newsam. (1011)
[104] Ibid., 1011-1012. Dame schools were where an elderly woman watched younger children and taught them letters and numbers and knitting until about 10 years of age.

unable to receive an equitable education when compared with boys during that same period. There are countless women who might have achieved more, who might have led happier, more fulfilled lives, if their society did not expect them only to become wives and mothers. While they all "made-do," the structure of the educational system itself militated against any sort of meritocratic educational system beyond elementary education. The economics of British industrial society and the vicissitudes of trade resulted in vast technological development that deskilled so many, and left millions unemployed. Combined with war, population loss, a decline in birthrate, and the end of Empire, taken together, these events conspired to make the early twentieth century the most transformative half century in modern British social history. And yet, the educational guidance from the government was to preserve the social status quo. Education was meant to produce obedient citizens who held fast to Christian ideals to devotion to King and Country. Never questioning, only reproducing in the next generation what had passed in the last. Set against the backdrop of enormous social change, upheaval, and unrest, along with early gains in women's suffrage, one would expect a less traditional, more secular form of education in Britain. But the reality for Longley, her respondents, and the authors of several autobiographies is that firm lines of gendered difference supported by the latest science in psychology and physiology were used to assert that girls were less capable intellectually and temperamentally than boys, and as such should not be subjected to more academically rigorous subjects. In short, working-class girls would be educated with the sole aim of creating a competent basis for a proper domestic life.

What Longley's research, and the experiences of countless working-class women reveal, is that though the educational policy was framed in paternalist beneficence, the real effect on girls was to stymie their intellectual development, to frustrate their ambitions to learn higher

math and more English literature. Like their fathers and grandfathers, during the late Victorian era, so many women sought further education as adults. They created their own autodidact tradition, not based in trade union politics, but in their own intellectual interests, whether it be cookery, education, literature, or sewing. Very little has been written on the interior lives of working-class women, and how they pioneered their own intellectual revolution in the 1970s and 1980s. This research serves as a starting point for deeper inquiry into this broad and resounding rejection of the education the British state provided girls between 1902 and 1944, and the structural inequalities that it promoted and exacerbated.

Chapter 7 Conclusion

This research has examined the history of gender differentiation of working-class girls' education in Britain between 1902 and 1944 and has concluded that the emphasis of their curricula was to provide an education for domesticity and motherhood. Rather than preparing girls for lives of work, their education prepared them for lives centered in the home and focused on the family. Domestic toil was life-long and selfless, the embodiment of the virtue of motherlove espoused by prescriptive authors and science teachers which easily allied itself with the moral treatment given mothers in British society. In this regard, the Board of Education carried forward in its expansion of Religious instruction, the feminization of piety that Callum Brown has argued occurred during this era, challenging the extent of secularization in British society.[1] By gearing all aspects of girls' education to motherhood as the likely end, the Board succeeded in promoting motherhood as the greatest exercise of citizenship a girl could contribute to British society. For them, it was upon motherhood that the salvation of the British nation rested.

Education for motherhood was multifaceted, yet all encompassing, driven by middle-class social anxieties over the persistence of poverty, intemperance, and biological degeneration of the British race. As such, the intentional objective to orient girls' education away from science and towards domesticity shows that contemporaries thought teaching motherhood could obviate or eliminate those social ills. The concurrent expansion and intensification of both religious instruction and domestic subjects' instruction reflects the logic of educationalists and social reformers. If girls were better educated in hygienic principles and religious tenets, then the next generation would be physically stronger and more morally sound that the last.

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[1] Callum Brown, *The Death of Christian Britain* (London: Routledge, 2001).

But motherhood was a pedestal, a symbol of the greatest hopes and aspirations of British society, precariously placed in the midst of tremendous social and cultural changes of the first half of the twentieth century. The home represented a safe harbor where Britishness prevailed against all incursions, and the domestic sphere was meant to nurture the populace through the storms it faced. Two world wars, numerous labor stoppages and strikes, the Great Depression, and the spread of Fascism all threatened to upend the home and violate the sanctity of the domestic sphere. If mothers failed to produce healthy and fit sons, as many did prior to the Boer War, they were deemed a disgrace and a liability to the nation. Their mistakes could not be repeated, so it was for motherhood that millions of working-class girls were educated.

Education for motherhood was first discussed in the context of religious instruction. Girls routinely received double the class time as boys in Bible study. Girls were taught the lifeways and traditions of Hebrew society at the time of Christ, and were expected to emulate the virtues of modesty, submission, and piety in their day-to-day lives, and especially as future mothers. The feminization of piety was the anchor that provided a moral justification for the importance of education for motherhood. Girls and women were meant to be the moral arbiters of their homes and were expected to teach their children proper manners and behavior as an exercise of motherlove. Girls learned that motherlove was the highest virtue a woman could possess, a gift straight from God, embodying His grace through its practice. In this way, religious instruction equated motherhood with the highest form of spiritual devotion a woman could express.

This view found support in what little science instruction girls received. They were taught that all animals had families, and that as the animals grew more complex, the fewer offspring they reared, leaving at the top, humans who had the most time to devote to their single baby.

Edith Cooper illustrated this view of biological teaching and termed it Nature's Plan for life.[2] It followed very closely with allusions to the Great Chain of Being that told of God's rational order of all things in creation and in heaven. As Anna-Katherina Mayer has argued, science was moralized to promote national pride, but here it was also used to promote motherhood as girls' citizenship.[3]

In domestic subjects' instruction which grew in popularity and in time devoted to it by the last years of schooling, girls were taught the processes to become efficient and hygienic homemakers. Domestic instruction ranged across several different subjects including needlework, laundry, cookery, and housecraft and taught devotion to one's duty to create a loving and clean home. These courses focused a girl's last school years squarely on the home and its upkeep, making the home the literal center of girls' senior elementary education. Her duty and devotion were tied both to Christian virtues of submission and humility as well as to the exercise of motherlove. Here motherlove was not just about loving a child but providing for its every need and comfort. Any scientific bias in domestic instruction, though spare, was focused to the end of emphasizing motherlove and the justification for all tasks, no matter how mundane. In this way science, religion, and domestic instruction all aligned toward emphasizing motherlove in such lessons.

The only area where instruction failed to bolster motherlove was in sex education. Observers harshly criticized mothers for failing to instruct their sons and daughters in the facts of life. Mothers were the moral center of the home, but a discussion of sex violated the morals they

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[2] Edith Cooper, *A Science Scheme for Girls Based On Biological Teaching*, (London: The National Union of Women Teachers, August 1930).

[3] Stephen Heathorn, *For Home, Country, and Race: Constructing Englishness in the Elementary School, 1880 – 1914* (Toronto: University of Toronto Press, 2000).; Anna-Katherina Mayer, "Moralizing Science: The Uses of Science's Past in National Education in the 1920s," *The British Journal for the History of Science* 30, no. 1 (March, 1997): 51-70.

were meant to embody, so ignorance and false tales of cabbage patch babies prevailed. Instead, most sex education conformed to religious views on the nature of marriage and conception within that relationship only. Sex was touted as the greatest power a woman could exercise since it was procreative and led to the expression of motherlove for the infant. Rather than educate young girls on the facts of biology and the changes of puberty, most pamphlets on sex education resorted to the same anthropomorphizing of animal life and the emphasis of God's anointing man to use sex to promote parental love. In this way, they conformed to the elision of science and religion and to the promotion of the virtue of motherhood in marriage.

But an education geared toward teaching motherhood severely limited the girls who undertook it. The working-class memoirs and autobiographical letters consulted above reveal how women thought about the circumstances their education imposed upon them. These sources are little utilized in previous research and offer an alternative view from the state's program of education for motherhood. Many women remarked that because of financial circumstances, they could not undertake secondary education that would have offered a more academic education to them. Instead they were subjected to multiple years of repeated lessons in domestic subjects if they had attained the highest form early, and many had. Some complained that they learned more from their mothers who had been deemed by the state as unfit to educate their own daughters in domesticity due to their poverty. Others were already doing domestic work to help out their mothers in the home prior to leaving school. What education for motherhood did not consider was the needs of those who would not become mothers, or those who wanted to follow some other occupation. These women spoke of limited opportunities to find work disconnected from the world of domesticity or were left without proper educational qualifications to seek out work in offices due to the domestic bias of their curriculum. Instead of the hope and anticipation that

educationalists thought education for motherhood would inspire, these women instead suffered unnecessary frustrations due to the confines of the education they received.

Without the autobiographies held at the Burnett Archive or the Papers of Lesley Longley which dealt with the efficacy of domestic subjects' instruction, this research could not have been completed. Many histories have discussed girls' education in Britain, but the vast majority focus on middle-class girls rather than working-class. As the British elementary education system was established to serve the children of the working-class, any history of education is incomplete without a consideration of class or the complications that class biases imposed on students. This focus makes this research unique and adds to the literature in social history as well as the history of education. Without first-hand accounts from working-class girls, their experiences could not be reconstructed, nor could their criticisms of British elementary education be known. With their inclusion, one can interpret the impact and effectiveness of education for motherhood that would otherwise be impossible.

Education for motherhood did continue, even after 1944 and the introduction of free secondary education to age 15. The emphasis on domestic subjects to the detriment of the inclusion of math and science continued well into the 1970s.[4] Girls' education did not begin to sync up with the boys' curriculum until the 1980s, and only in that decade did sex education enter the curriculum in earnest.[5] What the continuity of education for motherhood reveals is that it was a powerful symbol of stability in an everchanging world. That it persisted into the 1970s and 1980s through second wave feminism is a testament to the value of the ideal of motherhood

[4] Alison Kelly, Ed., *The Missing Half: Girls and Science Education* (Manchester: Manchester University Press, 1981).; Jane Purvis, A History of Women's Education in England (Milton Keynes, UK: Open University Press, 1991).

[5] Jane Pilcher, "School Sex Education: Policy and Practice in England 1870 to 2000," *Sex Education* 5, no, 2 (May 2005): 153-170.;

to the British state. It assured that the values of British society were passed on and in part refutes the extent to which secularization was a grave threat, both during the interwar era, and beyond. For British Educationalists, education for motherhood ensured that though things outside the home were changing at an ever-increasing pace, that the home remained the safe harbor, and made it the symbol of the reproduction of the social status quo.

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Appendix

Table 20: Chapter 3: The Lowe Revised Code, 1862

Subject[1]	Standard I	Standard II	Standard III
Reading	Narrative in monosyllables	One of the Narratives next in order after monosyllables in an elementary reading book used in the school.	A short paragraph from an elementary reading book used in the school.
Writing	Form on blackboard or slate, from dictation, letters, capital and small, manuscript.	Copy in manuscript character a line of print.	A sentence from the same paragraph, slowly read once, and then dictated in single words.
Arithmetic	Form on blackboard or slate, from dictation, figures up to 20; name at sight figures up to 20; add and subtract figures up to 10, orally, from examples on blackboard.	A sum in simple addition or subtraction, and the multiplication table.	
	Standard IV	Standard V	Standard VI
Reading	A short paragraph from a more advanced reading book used in the school.	A sentence slowly dictated once by a few words at a time, from a reading book used in the first class of the school.	Another short ordinary paragraph in a newspaper, or other modern narrative, slowly dictated once by a few words at a time.
Writing	A sentence slowly dictated once by a few words at a time, from the same book, but not the same paragraph.	A sentence slowly dictated once by a few words at a time, from a reading book used in the first class of the school.	Another short ordinary paragraph in a newspaper, or other modern narrative, slowly dictated once by a few words at a time.
Arithmetic	A sum in compound rules (money).	A sum in compound rules (common weights and measures).	A sum in compound rules (common weights and measures).

[1] Derek Gillard, "The Revised Code," in *Education in England: a Brief History*, http://www.educationengland.org.uk/documents/cce/revised-code.html, 340, 341.

Table 21: Chapter 3: Mr. Melles' Boy's Elementary Curriculum

Subject[2]	Form	Content/Skills	Periods Per Week	Duration per week
Physical Drill	I & II	Dancing	5	80 min
Games	I & II	Matches, sportsmanship	2	40 min
Religion	I & II	Prayers, Assembly	5	75 min
Religion	I & II	Bible Study Old and New Testament	2	60 min
Reading	I & II	Reading aloud, Recitation	5	150 min
English	I & II	Oral and Written Composition	5	225 min
Subject	Form	Content	Periods Per Week	Duration Per Week
Arithmetic	I & II	Use of common rules in daily circumstances	5	225 min
History	I & II	Social aspects of citizenship	2	90 min
Geography	I & II	Use of maps and regional commerce on roads	2	90 min
Science	I & II	Practical and experimental Nature study	2	90 min
Practical Work	I & II	Handwork connected to Science, Arithmetic, Mechanical Drawing	5	150 min
Music	I & II	Musical Knowledge, Singing	2	60 min
Art	I & II	No mechanical drawing	2	50 min
Literature	I & II	Character Study, dramatization	1	40 min
Physical Drill	III & IV	Drill or Dance	5	100 min
Games	III & IV	Sportsmanship, Hygiene	2	40 min
Religion	III & IV	Assembly, Hymn	5	75 min
Religion	III & IV	Bible Study Old and New Testament	2	60 min
Reading	III & IV	Recitation and Vocabulary	5	150 min
English	III & IV	Composition, Elocution, Grammar	5	225 min
Arithmetic Two Years	III & IV	Simple and Compound Rules, Fractions, Decimals	5	225 min
History Two Years	III & IV	Ancient and Classical History stories, British history to 1066	2	90 min
Geography Two Years	III & IV	World Geography, holidays, topography, survey of British Isles	2	90 min
Science Two Years	III & IV	Nature Study, Plant and Animal, Heavens and Earth,	2	90 min

[2] Michael E. Sadler, *Our Public Elementary Schools* (London: Thornton Butterworth Ltd, 1926), 61-70.

		Physical Science Intro, states and properties of matter		
Practical Work	III & IV	Connected to science, arithmetic, modeling in clay, mechanical drawing	5	150 min
Music	III & IV	Singing Folk and National Songs	2	60 min
Art	III & IV	Studies in pencil and crayon	2	50 min
Literature	III & IV	Stories and Poems, listening	1	40 min
Physical Drill	V- VII	Drill or Swimming	5	100 min
Games	V-VII	Sportsmanship, personal hygiene	2	40 min
Religion	V-VII	Hymn and Assembly	5	75 min
Subject	Form	Content	Periods Per Week	Duration Per Week
Religion	V-VII	Bible Study, Old and New, Moral instruction	2	60 min
Reading	V-VII	Poetry, Prose, textbook reading	5	225 min
English	V-VII	Composition of paragraphs, essays, lecture copying	5	150 min
Arithmetic Three Years	V-VII	Fractions, Decimals practical, applied; averages, proportion, shares; percentages, interest, mensuration.	5	225 min
History Three Years	V-VII	Norman, Plantagenet History; Tudor and Stuart Periods; Hanoverian Period	2	90 min
Geography Three Years	V-VII	British Empire, connect to history; Europe, North Africa; Brief survey of Africa, Asia, America	2	90 min
Science Three Years	V-VII	Elementary physics (experimental); Elementary mechanics (applied); elementary mathematics	2	90 min
Practical Work	V-VII	Woodwork or gardening	1 Afternoon	150 min
Music	V-VII	Part Singing, Choral	2	60 min
Art	V-VII	Pencil and painting connected to history	2	50 min
Literature	V-VII	Anthology prose or verse, novels, dramatize Shakespeare	1	40 min
Physical Drill	Ext VII	Drill or Swimming	5	100 min
Games	Ext VII	Recess	2	40 min
Religion	Ext VII	Assembly, Hymn	5	75 min

Religion	Ext VII	Bible Study, Old and New, revelation and spiritual truth	2	60 min
Reading	Ext VII	Read newspapers, magazines, textbooks, reference books	5	225 min
English	Ext VII	Oral Debates and Discussions, Written business letters, notes, essays	5	150 min
Arithmetic	Ext VII	Business methods, calculation, mensuration formula, metric system, stocks	5	225 min
History	Ext VII	Overview of British History connected to European, social history, citizenship	2	90 min
Geography	Ext VII	Longitude, Latitude, British and World Commerce	2	90 min
Science	Ext VII	Modern science, domestic or chemical; industrial or technical; commercial or electrical	2	90 min
Practical Work	Ext VII	Applied woodwork or metal work or Agriculture or handicraft	1 Afternoon	150 min
Music	Ext VII	Great Composers, singing	2	60 min
Art	Ext VII	Applied design, illustrations	2	50 min
Literature	Ext VII	Book club talks, essays	1	40 min

Table 22: Chapter 3: Mrs. Helen Dobson's Girls' Curriculum

Subject[3]	Age	Content	Duration Per Week
English Literature	9-10	Hiawatha, Ballads, Narrative Verse	As a Block 7 hr 30 min
Reading	9-10	Cheap books, Hans C. Andersen	
English Composition	9-10	Simple records, lists, oral recitation	
Grammar	9-10	Rules of the sentence, how to correct mistakes	
Writing	9-10	Penmanship – beauty and legibility	
History	9-10	Biographies of Great men	1 hr 30 min
Geography	9-10	How to read a map, where food comes from, weather	1 hr 30 min
Nature Study	9-10	Seasons in plant life, pond environment	30 min
Arithmetic	9-10	The four rules, fractions, decimals, numbers less than 100 used; mental math; concrete, practical examples	4 hr

[3] Sadler, *Our Public Elementary Schools,* 71-90.

Religious Knowledge	9-10	Biographies of OT characters, NT facts of the life of Christ; learning scripture by memorization – 20 Psalms and portions of Sermon on the Mount	2 hr
Drawing	9-10	Pencil and color tied to history and geography lessons	As a Block 7 hr 30 min
Modelling	9-10	Clay pottery	
Weaving	9-10	Small loom for simple patterns	
Raffia and Basketry	9-10	Beauty and ornamentation of finished product desired	
Needlework	9-10	Simple stitches for common items in the home	
English Literature	10-11	Heroes and the Heroic, Greek myths, Medieval legends, poetry	As a block 7 hr 30 min
Reading	10-11	Histories – reading for information	
English Composition	10-11	Illustrated notebook, summaries, elocution	
Grammar	10-11	Parsing nouns, verb tenses	
Writing	10-11	penmanship	
History (Social) Two Years	10-11	Community life from primitive times to present, hunter/gathers, traders, agriculture, castles, churches, manor houses, feudal system, enclosure, industry and machinery in towns	1 hr 30 min
Geography	10-11	Plans/map making for directions drawn to scale in the local area; The Country, natural resources; The British Isles market towns and commerce; Sea trade routes	1 hr 30 min
Nature Study	10-11	Web of life, interdependence, seasons and the garden, social life of animals, grasses	30 min
Arithmetic	10-11	Numbers to 1000, factors recognized on sight and products memorized; simple weights and measures, money, interest, fractions, decimals	4 hr
Religious Knowledge	10-11	History of the Israelite nation from Abram to Solomon; Social life 1 AD – village life, the synagogue and temple, feasts and fasts; The life of Christ in Luke; Memorize poetic parts of OT, parables	2 hr
Drawing	10-11	Lettering, calligraphy, cover art, decoration	As a Block 7 hr 30 min
Modelling	10-11	Clay, wood, pulp, medieval life	

Weaving	10-11	Narrow cloth with simple pattern	
Needlework	10-11	Increase difficulty by year end, household items like napkins, cushions, running, hemming, herring-boning, button and hole stitch	
English Literature	11-12	Midsummer Night's Dream Acted, scenes from other Shakespearean Works	
Reading	11-12	Abridged Dickens novels	As a Block
English Composition	11-12	Character sketches and vignettes	7 hr 30 min
Grammar	11-12	Simple form analysis, parsing of noun and verb	
History (Social) Two Years	11-12	Community life from primitive times to present, hunter/gathers, traders, agriculture, castles, churches, manor houses, feudal system, enclosure, industry and machinery in towns	1 hr 30 min
Geography	11-12	Empire, colonization, resources, maps and facts (tabulate); Climate and inferences on rainfall, wind, vegetation by clime; Weather and wind records	1 hr 30 min
Nature Study	11-12	Observation records, Seasons in plant life, pollination and fertilization	30 min
Arithmetic	11-12	Practice four rules [operations] on larger numbers, fractions, shortcuts in decimals and metric system, proportion, percentage, measurement to calculate amount and cost of fabric, wall paper, carpets	4 hr
Religious Knowledge	11-12	Biblical History from Solomon to the Exile; History of the Early Church, St. Paul and St. Peter; memorized selected Psalms, Proverbs, verses of Isaiah, the Sermon in Acts	2 hr
Drawing	11-12	Improvement of drawing skill to be more realistic, drawing from memory	
Weaving	11-12	Use material from previous year for a simple dress	As a Block
Needlework	11-12	Extend time as needed; finer work in embroidery; sewing undergarments, babies' clothes. Simplicity, speed, accuracy	7 hr 30 min
Colour Work, Design	11-12	Colors and patterns in pleasing combinations for home décor and dress	

Drawing	11-12	Improvement of drawing skill to be more realistic, drawing from memory	
English Literature	12-13	An Anthology of Poetry, Shakespeare	As a Block 7 hr 30 min
Reading	12-13	Abridged 19th Century Novels, individual work/selections	
English Composition	12-13	Forms of address in letter writing, accounts of tasks done in school, short essays with absolute accuracy in spelling and punctuation	
Grammar	12-13	Simple parsing of verbs; parts of speech	
History (Economic)	12-13	Saxon England; communications networks, medieval town and government, manorial courts, 1st parliament; England and the continent, Elizabethan voyages, the New World, the colonies and colonization; group discussion, homemaking and garden design	1 hr 30 min
Geography	12-13	The Atlas – connect chief countries and trade networks via port cities; voyages and travelers of old, interest in travel and colonization; Great earth movements - seasons	1 hr 30 min
Religious Knowledge	12-13	Up to this point, religious instruction should have been purely unsectarian; From this point, girls should be instruction in the truths of the Christian faith.	2 hr
Housewifery	12-13	Household management; utensils and appliances, cupboard and stocking, making soap, cleaning regimens; linens; carpets and linoleum cleaning, aim at perfection and thoroughness; care of pipes, flues and chimneys	
Laundry	12-13	Theory work to precede practice	
Cookery	12-13	Restaurant meals preparation	
Mothercraft	12-13	Lectures by public health officials in fitted facility outside school	As a Block 9hr 30 min
Hygiene	12-13	Personal and family, simple ailments	
Drawing	12-13	How to plan and alter dress patterns, stenciling and embroidery design	
Weaving	12-13	Skilled work, products sold	
Raffia	12-13	Leather work, glove making, rug making, dexterity	

Needlework	12-13	Make a complete outfit over two years work, how to use patterns and follow instruction, the use of different materials, costs, and usage	
Children's Clothing	12-13	By groups create sets of clothes; how to make linen, mending, the use of a sewing machine	
English Literature	13-14	Tennyson, Narrative poems, Shakespeare	
Reading	13-14	The aim should be to prepare girls to show good taste in their choice of books, how to read for information. Magazines, newspapers, circulars	As a Block 6 hr
English Composition	13-14	Allow for individual taste in descriptive and imaginative work	
History	13-14	Government: town and borough councils, mayors, rates and taxes, civil service, police, Representative Government; create scrapbooks of current events	1 hr 30 min
Geography	13-14	The English Empire, practical emphasis, emigration; world geography with maps; Nature study as Earth lore	1 hr 30 min
Arithmetic	13-14	A perfect exercise book should be produced as all operations are known	4 hr
Religious Knowledge	13-14	Continuation of instruction in the truths of the Christian faith.	2 hr
Housewifery	13-14	Continuation of lessons from the previous year.	
Laundry	13-14	Mrs. Dobson writes the following instructions:	
Cookery	13-14	At the age of 12, girls fitted to training [in a secondary school will be transferred]. The elementary sch-	As a Block
Mothercraft	13-14	ool will be able to deal more thoroughly with those who are now under the present system and are in no way able to take advantage of its over-weighted curriculum.	9 hr 30 min
Hygiene	13-14	[Elementary girls] may do excellent practical work, and will be more useful to the society at whose	
Drawing	13-14	expense they are educated if they are taught to make the best use of their powers. **Intellectual gifts are denied**	

		them; let them be cheerful and conscientious.	
Weaving	13-14	The Elementary school is in no way For the mentally deficient; its	
Raffia	13-14	In elementary facts will be kindled by the appeal of a less ambitions and	
Needlework	13-14	More practical curriculum	

Chapter 4

Clapham High School for Girls Domestic Subjects Syllabus[4]

> *Physiology*: [This is preceded by a short course of Biology, dealing in outline with the classification of invertebrate and vertebrate animals, the rudiments of plant structure.] General structure and functions of the body. The skeleton, structure of supporting tissues; the muscles. The systems and organs: circulatory, digestive, lymphatic, respiratory, urinary, cutaneous and nervous. Structure of eye and ear.
>
> *Hygiene:*
> Personal Hygiene: cleanliness, habits, exercise, rest.
> Hygiene of Dwellings and School Buildings: construction, air and ventilation, warming, lighting, water supply, and drainage.
> Hygiene of Child Life: care of infants and young children, rate of infant mortality, birthrate, death rate, zymotic death rate; mental and physical growth and development; feeding school children; hygiene of the special senses; physical and mental defects and their recognition; indications of ill-health; prevention of communicable disease; medical inspection of schools.
>
> *Chemistry*: (Theoretical and Practical)
> Elementary study of air, water, carbon dioxide, chalk and lime. Compounds and mixtures. Acids, bases, salts. Laws of chemical combination, equivalent weights and valency. Analysis of water with special reference to its use for domestic purposes. Elementary qualitative analysis of soaps, bleaching, and washing powders. Chemistry of laundry and household cleaning processes, disinfectants and antiseptics. Chemistry of food and cooking.
>
> *Physics*: (Theoretical and Practical)
> Elementary mechanics: estimation of length, area, volume as applied to measuring carpets, liquids. Measurement of mass with spring balances, levers, scales. Vacuum cleaners. Siphon action. Water pressure of pipes in a home.
> Heat: Temperature. Expansion of solids, liquids, gasses. Practical consequences of the expansion of solids. The gas laws. Specific heat, conduction, convection, radiation. Hot

[4] Prospectus, Clapham High School for Girls, Department for the Training of Teachers of Housecraft, 6-8. GDS/18/2/1. Newsam. n.d.

water pipes, hot air heating apparatus. Ventilation of houses by natural and artificial means. Conducting power of fabrics.
Light: Lighting power of gas, electric lamps, oil, and candles. The eye and vision.
Electricity and Magnetism: Simple phenomena of magnetism. Household electric batteries, electric lighting, bells, telegraph, and.telephone.

Cardiff, Wales Girls' School Science Syllabus[5]

Standard IV:

Air, composition, sources of vitiation. Ventilation of living and sleeping rooms. The lungs, respiration, defective breathing, fresh air and its effects on tuberculosis. Care of the body, skin, hair, nails, teeth. Important necessity of weekly change of linen. Personal cleanliness. Water, its source and uses; impurities and storage. Washing day and utensils. General structure of human body. The skeleton. Brief sketch of the chief organs and their functions. Defective postures and their effect on health. The Evils of tight clothing. Suitable and unsuitable clothing, errors in dress. Wool, its nature and manufacture. Silk, its production. Flax and the linen manufacture. Cotton and its manufacture. Need for food. Leathers and furs. Composition of food. Suitable food for a working man's breakfast and dinner. Evils of tea dinners. How to make tea, cocoa, and coffee properly. Manners of children at table. A week's housework. How to light a fire. How to make a bed. Care of paraffin lamps.

Standard V:

Food, its uses. Classification of foods. Tissues of the body. Nitrogenous foods. Albumens. Milk, pasteurization, feeding of babies. Leguminous foods. General review of digestive organs. Digestion of food. Circulation of the blood. Headaches of all kinds. Toothache, construction of jaw and teeth. Care of teeth. Earache, construction of ear. Coughs, colds, sore throats. Cuts and bruises. Burns and scalds. Chilblains and chapped hands. Ringworm, warts, corns, splinters, whitlows. Sore eyes. Treatment of common ailments to be practically demonstrated. What to do in case of a fire. Choosing a house. General hints of buying furniture. Evils of the hire system. Need for keeping accounts. How to buy beef, mutton, pork, fish. How to buy bacon, vegetables, and fruit. How to buy tea, coffee, flour, soap. Drapery sales, remnants. Economies in purchasing household supplies and clothing.

Standard VI:
Care of the baby:
Food: Natural milk and cow's milk. Composition of milk. Choice of bottles, and care and preparation of milk for bottles. How to mix baby's food (solid food in liquid form). Evils of patent foods. Regular intervals between food – quantities and how to give it.
Clothing: General rules – long clothes; short clothes. How to wash the baby. Baby's sleep – separate cot – and airing. Care during teething period. Treatment of baby's ailments.

[5] Domestic Science Syllabus. Cardiff Girls' School. 1925. Papers of the National Union for Women Teachers. UWT/D/28/17 Stack 12. Institute of Education, University College London, Newsam Library and Archives.

Tuberculosis: Consumption, what it is. Open air treatment. What poor people can do to fight the disease. Evils of over indulgence in alcohol. Evils of smoking for boys.
Care of Invalid: What to do till the Dr. comes; how to summon him. Environment of invalid. Homely local application formentations, poultices. Infection. Deodorants and disinfectants. Preparation of food for invalids. Feeding of invalid. Choking and suffocation. Foreign bodies in eye, ear, nose. Sprains. Broken limbs – arm, leg. How to carry patient. Poisoning. Fire.

Standard VII and School Leaving Class

What to do till the Doctor comes. Environment of invalid. Care of invalid, ventilation, etc. Homely local application formentations, poultices. Infection. Deodorants and disinfectants. Preparation of food for invalids. Feeding of invalid. Nursing sick children. Deodorants and disinfectants. Care of invalid during convalescence. How to read a clinical thermometer. How to change sheets when patient is helpless. Cleaning the sick room. Replenishing the fire without noise. Choking and suffocation. Foreign bodies in eye, ear, nose. Bandaging a cut finger. How to carry and injured person. Scalp wound. Hemorrhage. Fainting fits. Fits – what to do. Burning.

Beckton Road Girls' School, Canning Town, London, Domestic Science Syllabus[6]

Standard IV:

Health: Lessons on personal cleanliness; care of hair, teeth, and nails. Simple rules for the preservation of health. The value of fresh air, work, play, and sleep.

Home: The care of the home, management of daily and weekly work. Simple lessons on washing preparatory to practical work in laundry center.

Food and drink: The uses of food and drink. What things do we eat? Why is food necessary? Special value of different kinds of food. Things which people eat and drink for pleasure.

Standard V:

Health: The preservation of health. The bony structure of the body. Good positons of sitting and standing. Building up the body. Talks on food, digestion, and food values. Warmth of the body, talks on clothing, materials, styles of dress, taste in choice of clothes.

Home: Furnishing and beautifying the home. Buying furniture, hire purchase system. Simple schemes of home decoration. Marketing and thrift. Simple lessons on the scientific principles of cooking, preparatory to practical course at cookery center.

[6] Domestic Science Syllabus. Beckton Road Girls' School, Canning Town, n.d. Papers of the National Union for Women Teachers. UWT/D/28/17 Stack 12. Institute of Education, University College London, Newsam Library and Archives.

Food and Drink: Alcohol. Alcoholic drinks not ordinary food. What is alcohol? Some characteristics and uses of pure alcohol. The preparation of alcohol in beer, wine, and spirits. Effects of alcohol on the brain and nervous system; on body's strength and power to work; on power of body to resist disease; on digestion of food; on body temperature.

Standard VI:

Health: The chief organs of the body. Digestion of food. Respiration of fresh air. Circulation and care of the blood. Prevention of anemia. The brain and nervous system. Control of thought and action. Self-control – Temperance in all things.

Home: The choice of a dwelling. Number and arrangement of rooms. The garden – the pleasures of gardening. The care of house linen. Economies in the home. Labor saving devices.

Food and Drink: The use and nuisance misuse of food and its results. Principles which must be observed if errors of diet are to be avoided. The consequence of eating too much. Importance of taking food at regular intervals. Consequence of unsuitable foods. Malnutrition. Prevention of diseases due to faulty eating.

Standard VII:
Health:
a). Thrift. Preparation for old age and future needs. Post Office Savings Bank. National Savings Certificate. Co-operative Societies. Health Insurance Act.
b). Simple lessons on first aid. Treatment of cuts and bruises, burns and scalds. Stings and bites. Simple bandaging. Care of broken bones, the use of splints.
c). Simple lessons in Home Nursing. Qualifications of a good nurse. Care of sick room. Care of patient – making beds and changing sheets. Poultices and formentations. Care of the Convalescent. Infection and infectious diseases.

Food and Drink: The misuse and abuse of alcohol. Alcoholic excesses likely to be injurious. Facts revealed by mortality tables, by life societies and friendly societies. Social effects of excessive drinking. Wastefulness of excessive drinking. Prevention of evils arising from alcoholic excess.
Standard VIII, School leaving:

Health and Home: A general revision of work done during the course with greater detail.
Infants' Care: The care of the baby. The baby's bath. The baby's food. The baby's clothes. The baby's sleep. Infant ailments.