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Sally Campbell Galman and Christine A. Mallozzi

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She’s Not There: Women and Gender as Disappearing Foci in U.S. Research on the Elementary School Teacher, 1995–Present

Sally Campbell Galman

University of Massachusetts-Amherst

Christine A. Mallozzi

University of Kentucky

For this literature review, the authors asked, “What is the role of gender in research about elementary-level women teachers and preservice teachers in the past 15 years, and what have scholars learned about the gendered nature of women’s experiences in elementary-level preservice and in-service teaching in that time?” To be eligible for inclusion, works had to be published during or after 1995, study elementary preservice or practicing women educators, take place in the United States, focus on gender, and be empirical. Of the 54 articles that warranted in-depth investigation, 42 articles were excluded because teachers’ gender was subsumed under other social categories such as K–12 female students or male students and teachers. The majority of the 12 relevant articles employed small participant samples and exploratory approaches and depicted female teachers as struggling with or marginalized in the profession. A minority presented women teachers as reveling in the legacies of teaching. These findings beg for more research on women teachers’ gendered experiences.

KEYWORDS: women, gender, elementary teaching, United States.

Please don’t bother trying to find her; she’s not there. . . .
Argent (1964, Track 7)

Women represent the overwhelming majority of teachers in U.S. elementary schools, with statistics suggesting the newest cadre of preservice elementary teachers is more than 90% female (Ingersoll & Merrill, 2010; Zumwalt & Craig, 2005). This trend is known as feminization. The reasons for feminization vary and are as disputed as they are mysterious (deMarrais & LeCompte, 1998; Galman, 2012). Some attribute this trend to the sweeping changes fomented by the civil rights and labor movements, but others suggest that the women’s movement and the

economic necessities created by compulsory schooling helped create teaching as a feminized sphere (deMarrais & LeCompte, 1998). Still others describe elementary teaching as a profession feminized from its inception as a function of political and social discourse designed to ensure a reliable labor force (Cortina & San Roman, 2006), or driven by women's biological or natural predisposition in this field and their subsequent inability to achieve in other, higher status professional arenas (Labaree, 2006; Lortie, 1972; Simpson & Simpson, 1969).

However, despite multiple plausible explanations and principled exploration, feminization and women at work in the school as a gendered workplace remain largely unexamined. As musician Rod Argent observed, the absence of the female is obvious, and frustratingly so. He cautions the listener: "don't bother trying to find her, she's not there" (Argent, 1964). Furthermore, the phenomenon of feminization is rarely considered benign in either historical accounts or the discourse of the contemporary "boy crisis" or "war against boys" (Hoff-Sommers, 2000; Okopyn, 2008; Ringrose, 2007), where it is implied that an army of female elementary teachers represent a potential threat that should be closely surveilled and ultimately neutralized. The implied risk is that male students will be outnumbered and disadvantaged by female teachers who will only promote the achievement of female students—unconsciously (because they simply do not understand the biological differences in how boys learn) as well as consciously (because they want to promote females; Okopyn, 2008). This is the "general 'blaming' discourse directed at . . . women teachers" (Reynolds, 2001, p. 370) that has characterized much of the facile accounting around boys' underachievement and the boy crisis argument to date.

But even in the midst of these contentious debates about the supposed effects of elementary classroom feminization, scholars are not setting out to investigate the gendered professional experiences of female elementary school teachers in a focused, empirical fashion. As Acker (1995–1996) so deftly pointed out, "[M]y problem is not how to professionalize teaching or to reverse trends toward feminization . . . [but to] argue that serious study of teachers' work needs to take serious account of gender, but not in the commonsensical and frequently sexist way" as is often the case (p. 100). As Saffold and Longwell-Grice (2008) suggested, the young, middle-class women who fill many elementary teacher education programs are not a homogenous group, although they may be portrayed that way, if only through normalization and subsequent empirical inattention. Inspired by Acker's 1995–1996 sociological perspective on British, Canadian, and U.S. research and subsequent conclusion that more emphasis needed to be placed on "integrating gender into the mainstream study of teachers" (p. 101), we aimed to understand, in the more than 15 years since the Acker piece was published, how women and gender have appeared in U.S. research on elementary school teachers. Acker's scholarship on women, gender, and work in teacher education and schools is considered foundational in the field. About Acker's groundbreaking 1995–1996 review, Michael Apple (1995–1996), editor of that issue of *Review of Research in Education*, wrote,

Sandra Acker . . . take[s] up aspects of one of the most powerful dynamics affecting education historically and currently, the gendered structuring both of schooling and the institutions that surround it. While there has been growing recognition of the connections between gender and teachers' work, no systematic synthesis of the vast amount of increasingly international material

exists. Acker provides exactly the kind of synthetic account that is needed. (pp. xvi–xvii)

Our critical literature review method included an exhaustive interdisciplinary search of 57 scholarly education, sociological, anthropological, and gender and women's studies journals over the 15-plus-year period since Acker's (1995–1996) review. Electronic database searching for specific key terms yielded surprisingly few research studies that fit our criteria. These efforts suggest that gender is becoming even more invisible in empirical studies of elementary teachers' work in the U.S. context. As research on teachers and gender surges ahead in U.K., Australian, Canadian, and European contexts (Sabbe & Aelterman, 2007), this raises the question of why it has all but disappeared from the landscape of elementary teacher research in the United States since the mid-1990s. This article begins with an overview of how Acker's work shaped our research question, followed by a discussion of our methodological approach. Findings include a detailed discussion of the excluded studies as well as a review of the relevant included work. Possible implications of the included studies' collective findings and design as well as observed overall trends bring the article to a close.

Anchoring Our Research Question

Acker's (1995–1996) thorough and comprehensive review of the literature, conducted 15 years ago, was our primary motivation for conducting this review. It is important to note that this project should not be construed as a critique of Acker's review, but rather a charge taken up in response to her findings and resultant questions. When Acker did her review of the literature, which she acknowledged as both "slippery" and "enormous" (p. 100) in potential scope, she carefully illuminated the complexity of gender as a factor in teachers' work and women's experiences as teachers. It also revealed a key problem: that many approaches to exploring that terrain have been truncated, even reductionist in their emphasis on gender. She further found that a preponderance of women in the classroom was positioned as a problem to be corrected, usually by incentivizing males to become teachers to "reverse trends toward feminization" (Acker, 1995–1996, p. 100). The push for teacher professionalization was not Acker's project, but deprofessionalization and feminization are related phenomena (deMarras & LeCompte, 1998; Etzioni, 1969). Notably, professionalization is not without problems for women teachers. As Gitlin (1996) wrote, women do not benefit from professionalism all the time:

The disparities between the salaries of men and women teachers, the clustering of women in the least prestigious institutions, the dominance of men in administrative positions and even one of the primary gendered assumptions that teachers need others—usually male administrators—to oversee the aims and goals to which education is directed . . . functionalist professionalization projects [only] advance the interests of those on the upper rungs of the educational hierarchy. (p. 619)

Acker's suggestion that gender suffers from overreduction in most research, and that women teachers are deemed subpar even within a feminized profession, resonated deeply with us.

Acker, a sociologist, framed her inquiry as a review of studies of work, and it is important to note that in the empirical literature on teachers' work, studies fall rather neatly into two camps: research that acknowledges gender and research that does not. As Noddings (1990) observed, "The dominant critiques of school-teaching as a profession almost ignore the concerns of women" (p. 412) despite being a profession populated almost entirely by female workers. In much educational research on elementary teaching contexts, it is simply taken for granted or not of interest that almost all teacher participants are female, and the related historical and sociopolitical effects that might be involved are unexplored. Women's experiences as teachers remain unexplored except for, as Acker (1995–1996) wrote, "occasional paragraphs and sentences that make reference to some issue of gender" (pp. 142–143). She continued, "It is still relatively rare to find mainstream work, especially by men, that thoroughly integrates gender into the analysis of some feature of teachers' work" (p. 143). Acker's finding spurred our belief in the value of studies specifically on women teachers' gendered experience because, in the elementary teaching context, women *are* the mainstream.

Method

Our research questions were as follows: "What is the role of gender in research about elementary-level preservice and practicing women teachers in the United States since Acker's piece was published more than 15 years ago, and what have we learned about the gendered nature of women's experiences in elementary-level preservice and in-service teaching in that time?" In other words, did the research community hear and take up her charge, or do Acker's patterns hold fast in the decade and a half since her work was published? What are the contours of the work being done on women's gendered experiences in that terrain?

Departing From Acker

We framed this review as an analysis of the trends in the empirical research literature since Acker's (1995–1996) work, which we used as a starting point. However, because Acker's approach was greatly informed by her own perspective and experiences, we found that our process quickly and necessarily deviated from hers as we used our own perspectives to direct our search. For example, Acker concentrated on teachers' work from largely a sociological perspective. As educators, we focused on gender and teaching grounded in the interdisciplinary field of educational research. Although we were inspired by Acker's literature review, findings, and subsequent charge, we decided our methodology must be somewhat different from the one she employed.

One important distinction is a contextual one; Acker included studies about teachers in an array of English-speaking contexts, including the United States, Canada, Britain, and Australia, in part because of her familiarity as a teacher across many of these contexts as well as her urge to interrupt a tendency for international policies to be driven by U.S.-based research, despite very real differences between contexts. Although we in no way wish to affirm or support U.S. centrism in the global research community, we have limited our review to only those studies where data collection took place in the United States among U.S. populations.

Although a global perspective on the phenomena associated with women and work in education is valuable (see Sabbe & Aelterman, 2007), we had a variety of

pragmatic as well as theoretical reasons for limiting our review to a U.S. sample. Most important, in the years since the conclusion of Acker's review, the United States has been in a rapidly shifting, politically and socially unique educational context. Although other countries have certainly experienced their own series of accountability reforms (Hopmann, 2008; Meade & Gershberg, 2008), the No Child Left Behind (NCLB) legislation in the United States, which began to take effect in 2002, had effects unlike other educational reforms in the U.S. context. Significant effects on teacher education programs were evident as the first crops of students who were themselves educated under NCLB were entering programs to be teachers (Brown, 2010). Similarly, the neoconservative renaissance that characterized much of youth and popular culture in the G. H. W. Bush and G. W. Bush era (1990s–late 2000s) had an influence on how girls and women thought about themselves, attainment, gender, and work (Aronson, 2003; Douglas, 2010; Nail & McGregor, 2009). Although political and social changes were certainly afoot in other contexts, we wanted to focus on the United States specifically and avoid treating international studies as “add-ons” for shallow comparisons. Simply put, ours was not a comparative project.

Furthermore, our theoretical basis for limiting our search to U.S. research stems from our perspective that identity categories are socially and culturally located, a matter that Acker (1995–1996) found needed more extensive research attention. Concentrating our review on the United States allowed us to draw from our own familiarity with those contexts and acknowledge that the institution of U.S. education is a social, cultural, political, and historical body. The patterns of contemporary and historical feminization in teaching are unique in the United States, as observed by Judge (1995), who wrote that U.S. schools have been historically shaped by the influx of immigrants, “on a scale that is simply inconceivable anywhere else in the world, requir[ing] the school to be the one agent of assimilation” (p. 262). The teacher, then, must be such a cultural and social agent, and “the image of the teacher must everywhere and always be amiable and welcoming” (p. 265) and typically also female: “The teacher is always ‘she’” (p. 265).

Our acceptance that social, cultural, historical, and political matters are paramount in understanding gender and women teachers in schools resulted in our concentration on research that Sabbe and Aelterman (2007) called gender dynamics research. This type of research uses a constructionist perspective to present gender as determined by more than just sex difference. Sex difference research tends to report findings that do little more than describe a demographic (e.g., females did X, and males did Y) and frames gender as by and large deterministic. According to Acker (1995–1996), this essentialist research creates a category for gender but does little to integrate or center gender in the analysis. Our aim was to document research that gave gender an actual analytic role, which necessitated a focus on research that did more than draw a line between the sexes.

The context of U.S. schools also directed our attention toward preservice and practicing teachers at the elementary level, which we define as kindergarten to fifth or sixth grade (serving students ages 5–11 or 12 years). U.S.-based elementary level education is a site of more intensified and institutionally complex professional feminization than any other level of schooling. Primary-level education (usually defined as kindergarten to second grade, ages 5–8) is more inexorably

associated with feminized care work than other educational labor and is therefore more subject to biological determinism as a professional rationale (Galman, 2012; Zumwalt & Craig, 2005). As Wu (2011) observed, “Teaching young children in the public domain has been denied equal pay and social status comparable to other professionals because the job is viewed as an expression of women’s natural maternal instinct” (pp. 35–36). We expected that this sampling would deliver more abundant examples and more in-depth inquiry into women and gender than in a larger sample including a wider array of grade-level contexts.

Of note, Acker (1995–1996) did not include teacher education, preservice or otherwise, in her review of gender and teaching, concentrating instead on teachers working in classrooms rather than preparatory contexts. In light of the recent release of the National Research Council’s (2010) report on teacher preparation, which found that because of a lack of systematic research on teacher education programs there is little understanding of the characteristics of aspiring teachers, we felt it imperative to examine teachers’ work across a professional trajectory encompassing preparation as well as practice.

We further focused our search on empirical studies, as we were keen to see if Acker’s (1995–1996) call for more research emphases on gender in teacher research had been answered by the educational research community, resulting in generation of new data and analyses. In a further departure from Acker’s work, which analyzed much historical, personal experience and policy research using data sources such as diaries, public records, and other texts, we analyzed only empirical studies in which living participants generated information for direct observation and examination. Like Guarino, Santibanez, and Daley (2006), we acknowledged that although rich theoretical work exists, it is beyond the scope of what we can productively review here. Similarly, we defined empirical work as work that “offer[s] evidence—quantitative or qualitative, or both—for conclusions, rather than simply opinion, theory or principles” (p. 177). Guarino et al. continued,

We focused here on empirical work only to highlight and distill the reliable existing evidence relating to teacher recruitment and retention for researchers and policymakers alike. We therefore excluded simple program descriptions that were not analytical or evaluative and publications that offered only opinions, theory, or principles without offering new or original evidence to support conclusions. Thus literature reviews and publications that cited only research performed by others were excluded. (pp. 177–178)

Similarly, we defined empirical studies as those that used data resulting from direct observations or experiments, and although some may have included textual and graphic data, to be included in this review those could not be the only data sources. In sum, for inclusion in this review of the empirical literature, research needed to meet the following criteria:

1. Work must be published during or after 1995, the year of Acker’s review;
2. The research must study educators at the elementary (kindergarten–5th or 6th grade) level;
3. The study must take place in U.S. educational contexts at the preservice or practicing level;

4. Gender must be a focus of study;
5. Women teachers must be included as participants (i.e., no studies solely about men); and
6. All studies, in whole or in part, must be empirical.

Articles that mentioned *gender* as a keyword, as a subject identifier, or within the abstract were abundant. However, many of these studies mentioned gender only as a demographic marker (e.g., participant data were recorded by gender, race, and SES). Once we filtered articles based on our above-mentioned criteria, our overall number of included pieces shrank rapidly, a point discussed throughout the article.

Despite some differences from Acker's (1995–1996) design, we built on her review and its central findings and subsequent charge to fundamentally shape our work. Most important, in our review of the empirical literature, we sought to emphasize the driving importance of Acker's central observation. She argued that "more emphasis needs to be placed not simply on research on women teachers but on integrating gender into the mainstream study of teachers" (p. 101). Therefore, again we asked, "What is the role of gender in research about elementary-level preservice and practicing women teachers in the United States since Acker's piece was published more than 15 years ago, and what have we learned about the gendered nature of women's experiences in elementary-level preservice and in-service teaching in that time?"

Process

We devised a list of keywords for the Internet searches using the database Academic Search Premier. These terms were arranged into three categories (see Table 1). The primary list defined human participants of interest (i.e., teachers) and synonyms of the term. The secondary list included words associated with the object of knowledge in question, gender. The tertiary list was made of modifiers that we thought would be helpful in further refining the search outcomes. To evaluate the effectiveness of our search terms, we conducted test searches with specific journals that we anticipated having several studies of interest (e.g., *Journal of Teacher Education*, *Teaching and Teacher Education*, *Gender and Education*). We also conducted several Boolean searches in Academic Search Premier, using different combinations and levels of the search terms. We initially anticipated that this search would require us to sift through hundreds, or possibly thousands, of articles, and we expected to rely heavily on the tertiary terms to be helpful in winnowing the results. However, during the test searches we quickly found that including the tertiary terms limited our searches unnecessarily and discarded potentially useful studies, so we decided to forgo the tertiary terms and search only with the primary and secondary term lists. We subsequently relied on our analytic process (described below) to determine how the articles intersected with concepts in the tertiary term list.

Next, we compiled a list of the journals from which Acker (1995–1996) found related studies in her review (see Table 2). Of the 47 journals Acker included in her review, we included 33 and excluded 15 because they were journals that published solely non-U.S. context studies, did not publish pieces that matched our criteria, or were defunct. Knowing that journals are consistently being introduced to the education field and that our interdisciplinary educational research perspective is

TABLE 1
Key search terms

Primary	Secondary	Tertiary
Teacher	Female (truncated in search as fem*)	Career
Teaching	Feminine (truncated in search as femin*)	Discernment
Teacher education	Feminist (truncated in search as femin*)	Disposition
Educator	Feminization/feminized (truncated in search as femin*)	Early childhood
Educationist	Gender Women	Elementary Inservice In-service Practicing Practitioner Preservice Pre-service Primary Semi-professionalism Trajectory Vocation Work Young children Domestic/ideology Carework/care

Note. Search terms were gathered at the start of the literature review search. In preliminary test searches, primary, secondary, and tertiary terms were used, but in subsequent searches for literature, only primary and secondary search terms were used because the tertiary terms did not enhance and at times adversely affected yield.

different from Acker's, we scoured the journal lists of three major publishers in educational research, SAGE, Taylor & Francis, and John Wiley, for journals that publish studies on teachers and teaching. We read descriptions of journals for the key terms and investigated several issues of 31 journals, finally adding 24 journals that matched our criteria. In sum, of the 78 journals that offered possibilities for our review, we searched 33 journals that were part of Acker's review and 24 journals that were not in Acker's piece but seemed relevant in the contemporary and U.S.-based search context.

We divided the list of journals, and each researcher conducted Boolean searches in Academic Search Premier and ERIC using primary and secondary search terms for each journal title on her respective list. In a handful of cases, individual journals did not appear on the two databases. For these, we searched the journals directly for key search terms using publisher-hosted search engines or other databases such as JSTOR. Next, we recorded the number of hits for each of the primary and secondary search term combinations in Microsoft Excel and read each abstract in the results list for matches to our criteria. We then downloaded or otherwise obtained the full text of the 54 corresponding articles for in-depth investigation. The Excel spreadsheets and downloaded articles were uploaded to a shared electronic drive

(text continues on p. 15)

TABLE 2*Journal pool from Acker's (1995–1996) reference list and major educational publishers*

	Journal title	In Acker?	Publisher	# citations in Acker	# citations in our review prior to complex exclusions	# citations of relevant articles
1	<i>American Educational Research Journal</i>	Yes	SAGE	4	3	Did not meet criteria
2	<i>American Journal of Education</i> (cited in Acker as <i>Journal of Education</i>)	Yes	University of Chicago	1	Did not meet criteria	
3	<i>American School Board Journal</i>	Yes	National School Boards Association	1	Did not meet criteria	
4	<i>Annual review of sociology</i>	Yes	Annual Reviews	1	Did not meet criteria	
5	<i>Australian Journal of Education</i>	Yes	ACER (Australian Council for Educational Research)	1	Non-U.S. journal (not included)	
6	<i>British Educational Research Journal</i>	Yes	Taylor & Francis	2	Non-U.S. journal (not included)	
7	<i>British Journal of Sociology of Education</i>	Yes	Taylor & Francis	11	Non-U.S. journal (not included)	
8	<i>Cambridge Journal of Education</i>	Yes	Taylor & Francis	2	Non-U.S. journal (not included)	
9	<i>Canadian Journal of Education</i>	Yes	Canadian Society for the Study of Education	6	Non-U.S. journal (not included)	
10	<i>Canadian Journal of Sociology</i>	Yes	University of Alberta	1	Non-U.S. journal (not included)	
11	<i>Changing English: Studies in Culture and Education</i>	No	Taylor & Francis		Non-U.S. journal (not included)	

(continued)

TABLE 2 (continued)

	Journal title	In Acker?	Publisher	# citations in Acker	# citations in our review prior to complex exclusions	# citations of relevant articles
12	<i>Child Language teaching and Therapy</i>	No	SAGE		Did not meet criteria	
13	<i>Comparative Education Review</i>	Yes	University of Chicago	1	Did not meet criteria	
14	<i>Current Issues in Education</i> (cited in Acker as <i>Issues in Education</i>)	Yes	Arizona State University	1	Defunct	
15	<i>Curriculum Inquiry</i>	Yes	John Wiley	1	2	Did not meet criteria
16	<i>Early Years: An International Journal of Research and Development</i>	No	Routledge		Did not meet criteria	
17	<i>Education 3-13—International Journal of Primary, Elementary and Early Years Education</i>	No	Routledge		Did not meet criteria	
18	<i>Education and Urban Society</i>	No	SAGE		1	1
19	<i>Educational Administration Quarterly</i>	Yes	SAGE	1	3	Did not meet criteria
20	<i>Educational Forum</i>	Yes	Taylor & Francis	1	1	Did not meet criteria
21	<i>Educational Leadership</i>	Yes	ASCD	4	1	Did not meet criteria

(continued)

TABLE 2 (continued)

	Journal title	In Acker?	Publisher	# citations in Acker	# citations in our review prior to complex exclusions	# citations of relevant articles
22	<i>Educational Management and Administration & Leadership</i> (cited in Acker as <i>Educational Management and Administration</i>)	Yes	SAGE	1	Did not meet criteria	
23	<i>Educational Research</i>	No	Routledge		Did not meet criteria	
24	<i>Educational Researcher</i>	Yes	SAGE	2	2	Did not meet criteria
25	<i>Educational Review</i>	No	Routledge		Did not meet criteria	
26	<i>Educational Studies</i>	No	Taylor & Francis		Did not meet criteria	
27	<i>Equity and Excellence in Education</i>	No	Taylor & Francis		1	1
28	<i>Frontiers: A Journal of Women Studies</i>	Yes	University of Nebraska Press	1	Did not meet criteria	
29	<i>Gender & History</i>	No	John Wiley		Did not meet criteria	
30	<i>Gender & Society</i>	No	SAGE		Did not meet criteria	
31	<i>Gender and Education</i>	Yes	Taylor & Francis	8	4	4
32	<i>Gender, Work & Organization</i>	No	John Wiley		Did not meet criteria	
33	<i>Harvard Educational Review</i>	Yes	Harvard Press	3	Did not meet criteria	
34	<i>Historical Studies in Education</i>	Yes	Canadian History of Education Association	2	Did not meet criteria	

(continued)

TABLE 2 (continued)

	Journal title	In Acker?	Publisher	# citations in Acker	# citations in our review prior to complex exclusions	# citations of relevant articles
35	<i>History of Education</i>	Yes	Routledge	1	Did not meet criteria	
36	<i>History of Education Quarterly</i>	Yes	John Wiley	1	Did not meet criteria	
37	<i>History of Education Review</i>	Yes	Australian and New Zealand History of Education Society (AN-ZHES)	1	Non-U.S. journal (not included)	
38	<i>History Workshop Journal</i>	Yes	Oxford	1	Did not meet criteria	
39	<i>International Journal of Qualitative Studies in Education</i>	Yes	Routledge	2	1	1
40	<i>International Studies in Sociology of Education</i>	Yes	Routledge	1	1	Did not meet criteria
41	<i>Journal of Career Development</i>	No	SAGE		Did not meet criteria	
42	<i>Journal of Curriculum and Supervision</i>	Yes	ASCD	1	1	Did not meet criteria
43	<i>Journal of Early Childhood Research</i>	No	SAGE		Did not meet criteria	
44	<i>Journal of Early Childhood Teacher Education</i>	No	Taylor & Francis		Did not meet criteria	
45	<i>Journal of Education for Teaching</i>	No	Routledge		2	Did not meet criteria

(continued)

TABLE 2 (continued)

	Journal title	In Acker?	Publisher	# citations in Acker	# citations in our review prior to complex exclusions	# citations of relevant articles
46	<i>Journal of Educational Equity and Leadership</i>	Yes	--	1	Defunct	
47	<i>Journal of Educational Foundations</i> (cited in Acker as <i>Educational Foundations</i>)	Yes	American Educational Studies Association	1	Did not meet criteria	
48	<i>Journal of Negro Education</i>	Yes	Howard University	1	Did not meet criteria	
49	<i>Journal of Teacher Education</i>	No	SAGE		5	Did not meet criteria
50	<i>Ontario History</i>	Yes	Ontario Historical Society	1	Non-U.S. journal (Not included)	
51	<i>Paedagogica Historica</i>	No	Routledge		Did not meet criteria	
52	<i>Pedagogies: An International Journal</i>	No	Taylor & Francis		Did not meet criteria	
53	<i>Phi Delta Kappan</i>	Yes	PDK international	1	Did not meet criteria	
54	<i>Psychology of Women Quarterly</i>	No	John Wiley		Did not meet criteria	
55	<i>Race Ethnicity & Education</i>	No	Routledge		5	Did not meet criteria
56	<i>Review of Education, Pedagogy & Cultural Studies</i>	No	Routledge		Did not meet criteria	
57	<i>Review of Research in Education</i>	Yes	SAGE	3	1	Did not meet criteria
58	<i>Screen Education</i>	Yes	Oxford	1	Did not meet criteria	

(continued)

TABLE 2 (continued)

	Journal title	In Acker?	Publisher	# citations in Acker	# citations in our review prior to complex exclusions	# citations of relevant articles
59	<i>Sexualities</i>	No	SAGE		1	Did not meet criteria
60	<i>Signs</i>	Yes	University of Chicago	1	Did not meet criteria	
61	<i>Social History</i>	Yes	Taylor & Francis	2	Did not meet criteria	
62	<i>Social Problems</i>	Yes	University of California Press	2	2	1
63	<i>Sociological Review</i>	Yes	John Wiley	1	Did not meet criteria	
64	<i>Studying Teacher Education</i>	No	Routledge		2	Did not meet criteria
65	<i>Teacher Education and Special Education (TESE)</i>	No	SAGE		Did not meet criteria	
66	<i>Teachers and Teaching: theory and practice</i>	No	Routledge		1	1
67	<i>Teachers College Record</i>	Yes	Teachers College, Columbia University	3	6	3
68	<i>Teaching and Teacher Education</i>	Yes	Elsevier	1	5	Did not meet criteria
69	<i>Teaching Education</i>	No	Routledge		Did not meet criteria	
70	<i>The Curriculum Journal</i>	Yes	Routledge	1	Did not meet criteria	
71	<i>The Teacher Educator</i>	No	Routledge		Did not meet criteria	

(continued)

TABLE 2 (continued)

	Journal title	In Acker?	Publisher	# citations in Acker	# citations in our review prior to complex exclusions	# citations of relevant articles
72	<i>Theory and Research in Education, (formerly known as The School Field)</i>	No	SAGE		Did not meet criteria	
73	<i>Theory into Practice</i>	Yes	Ohio State University	1	Did not meet criteria	
74	<i>Times Educational Supplement</i>	Yes	The Times	2	Non-U.S. journal (not included)	
75	<i>Urban Education</i>	No	SAGE		1	Did not meet criteria
76	<i>Work and Occupations</i>	Yes	SAGE	1	Did not meet criteria	
77	<i>Working U.S.A</i>	No	John Wiley		Did not meet criteria	
78	<i>Written Communication</i>	Yes	SAGE	1	Did not meet criteria	
Total citations				89	54	12

that was accessible online for remote resource pooling. Then, we read and analyzed the complete articles to determine their individual saliency to the research questions and fit within the selection criteria. Summaries of our findings were entered into Excel worksheets alongside the original search information and citation for each article.

Exclusions

After we completed the keyword search, we further refined our search by a process of simple and complex exclusions.

Simple Exclusions

Simple exclusions were articles that, on reading beyond the abstracts, plainly did not meet the criteria. First, a preponderance of articles that came up in our search terms were not, in fact, empirical work. These constituted the largest number of exclusions out of the three types of simple exclusions. For example, many of these were theoretical or informal discussions, thought pieces, or popular magazine shorts of one page or less. Although we cannot speculate as to the situation in other

areas of specific social category research (e.g., research on race, socioeconomic status, or similar), we did think it was important to observe that a dearth of empirical research on women in teaching was accompanied by a fair amount of nonempirical writing.

Second, our project was limited to a discussion of elementary-level teaching and preservice preparation, bracketed as kindergarten to fifth or sixth grade. Because school teachers at particular school levels (i.e., early childhood, elementary, middle, secondary, college and university) occupy unique cultural and sociological positions in U.S. culture (deMarrais & LeCompte, 1998), we removed the few articles ($n = 2$) that included both elementary and secondary teachers but did not distinguish between the two in findings or discussion in such a way that it was possible to extrapolate independent findings. Although all articles about other grade-level teaching (such as secondary level) were deeply instructive, their foci made them impossible to include.

Third, we excluded all articles with misleading keywords, subject identifiers, or abstracts, usually because gender was not an analytic category and was used only to specify participant demographics. For example, gender was a nominal characteristic, along with race, age, years of classroom experience, and so on, but was not examined. These erroneous keywords and subject identifiers may have been chosen from a keyword list, a common requirement in electronic submission systems, which might not allow authors to assign more accurate keywords. Regardless, inaccurate identifiers led us to look for gender analysis where there was none and ultimately remove those articles. The total number of articles that appeared as “hits” but were removed as simple exclusions for the above reasons was 134.

Complex Exclusions

Of the 54 articles that remained and were not disqualified for the reasons listed in the above section, we were surprised to find that an in-depth reading of the articles themselves led to our excluding 42 of these studies. Because the total yield was so small ($N = 12$), we double- and triple-checked our database searches to confirm that we had identified the entire body of relevant articles based on our search design and research question. An extensive exclusion analysis revealed that the 42 articles were appropriately removed as complex exclusions.

Articles that fell under the complex exclusions category were those that passed the simple exclusion process but, on more examination, were not relevant to our pursuit. These more complex cases required nuanced decision making to justify why they did not match what we considered clear criteria in regard to a direct research question. Our exclusion analyses reinforced that in research on such an unresolved topic as gender, even clear parameters can be muddled. A more in-depth discussion of the complex exclusions is warranted to understand the research that adds to descriptions of gender and women teachers but does not quite meet Acker's (1995–1996) call for making gender central to the analyses or our further requirement that studies address the female teacher.

It is also important to note that in a postmodern analysis of gender, we sought to resist the simplistic employment of the problematic binary that pits “what counts” against “what doesn't.” One alternative to the binary approach was to use a continuum instead. However, in our attempts to structure our discussion as a

range of treatments of gender and women in empirical work, we also struggled with employing such a continuum. We found that a continuum model required us to effectively “rank” a series of inadequate treatments, asking ourselves (a) which pieces come closest to adequacy, (b) which only somewhat fall short of the mark, and (c) which are deemed utterly unsalvageable. For example, we could not determine which of these studies constituted a more acceptable analysis of gender: an article that purports to address women teachers and gender but ignores these variables in favor of a critical race analysis or one that ignores these variables in favor of a discussion of elementary school girls. In the end, both fail to address women teachers and gender. To rank these articles on a continuum relegates the inattention to gender as either not so bad, sort of bad, or really bad and in turn justifies doing gender analysis poorly. As such, we used ultimately a binary approach, but supplemented that with a generously constructed discussion of complicated exclusions that is as resistant as possible to simplistic deductions. However, we must affirm that articles that failed to address women and gender in different ways failed nonetheless.

We catalogued the articles on an Excel spreadsheet, writing summaries and noting our initial response to each in light of the research question. Through reading and cataloging these 54 articles, we discovered that 42 were not relevant to our question and classified them as complex exclusions for one or more of the following reasons: (a) The research purported to address gender but made it secondary to, or completely subsumed by, a discussion of other factors, most frequently race and/or identity; (b) the research addressed gender in the context of kindergarten to fifth or sixth grade students but not regarding the students’ female teachers; or (c) the research addressed gender in the classroom only through the lens of normative maleness, be that of students, male teachers, or other males. Table 3 provides a breakdown of complex exclusions by type. Further discussion of these exclusions follows in the paragraphs below.

Studies focused on other social categories. Our review encountered several studies that purported to address the complexity of multiple social identities, including gender, but analyzed participant experiences heavily, or solely, on one social category, most often racial/ethnic experiences. Although these studies provided powerful analyses of privilege, oppression, and identity in teaching and learning settings, for the most part they did not address gender. However, singular, additive, and intersectionality views of other social markers were present in research on women teachers.

Singular approach. A singular view of social markers separates social positions, so that being a woman is seen as a separate issue from another social category (e.g., being White). One example of a singular approach is E. Young’s (2010) work on administrators and teachers at an urban school enacting and assessing culturally relevant pedagogy. Despite the article’s use of gender as a keyword, the study was exclusively about race. The inattention to gender or other categories was so pervasive that in a table on the fourth page of the article meant to introduce the participants, only the names, race, role in school, and years of experience were provided. The reader discovers after two thirds of the article that the two participants, Jamie and Madison, are women. The keyword *trifecta*, “race, class, and gender issues,”

TABLE 3*Analysis of complex exclusions*

Search yield	Total = 188
Simple exclusions	(total simple exclusions = 134)
Complex exclusions (<i>by type, below</i>)	(total complex exclusions = 42)
<i>Gender was ignored in favor of other variables.</i> Such studies included references to many social identities including gender, but these pushed gender and other matters into the background rather than as a focus. This was especially true for studies privileging analyses of race.	21
<i>Female teachers were forgotten as studies emphasized the remediation of female students.</i> Gender vis-à-vis femaleness was a significant variable as an academic barrier for only K–5th or 6th grade girls, and greatly related to the remediation of girls in science and math courses.	16
<i>Female teachers did not matter except insofar as they have potentially negative effects on males.</i> Women teachers are a gender problem, especially for boy students, to be solved by adding males to the teaching force.	5
Total included studies	12

and phrases such as “given her position as a White, middle-class female, this assumption showed deep cultural biases” (p. 256) indicate the author’s and possibly the editorial team’s awareness of the importance of multiple social markers. However, the analysis does not extend beyond the singular marker of race.

Additive approach. An additive approach acknowledges multiple social categories but holds that it is the addition of historically dominant or oppressed categories that determines one’s position within the social hierarchy. For example, in the United States, a Black woman would be more oppressed than a White woman, and both would be more oppressed than a White male. In our search, these studies (e.g., Cockrell, Placier, Cockrell, & Middleton, 1999; White, 2009) positioned gender as a starting place of significance, stating that it was the homogeneity of the educator population (i.e., mostly White, female, middle class, able-bodied, heterosexual) that justified investigation. However, these studies did not position gender as an analytic category. In fact, gender was barely noticeable except to provide researchers with the initial rationale to examine the mostly female teaching population. These studies were all robust analyses of race and ethnicity; however, they missed opportunities to examine the gendered experiences of female teachers, as if because it is plentiful, femaleness is somehow not an area of interest in studies with an entirely female teacher participant pool (Garmon, 2004; Mullen, 2001) or in studies including female teacher educators (Abt-Perkins, Hauschildt, & Dale, 2000).

Garmon’s (2004) and Guyton, Saxton, and Wesche’s (1996) interview studies are illustrative examples of the additive approach to social categories. Garmon

used additive language, stating the mostly “White and female” (p. 201) teacher population was good reason to increase teachers’ multicultural awareness to better work with a diverse student population. Despite race and gender prompting the call to research, gender was not a matter for analysis, even though other social categories were, such as religion, locale (e.g., urban, suburban), class, and geographic location (e.g., non-Western). Guyton et al. (1996) named minorities in teacher education as “males and people of color” (p. 644) in their investigation of diversity in education. Although women of color were included in their sample, gender was discussed as a variable of interest only when it came to male participants, understandably because the researchers were looking at minorities in teaching (i.e., males), but the matter of being a minority benefiting from hegemony was not questioned, even in presentation of findings that “males felt valued more than the female teachers” (p. 649). In fact, the study held to the additive approach in discussing that “the male teachers felt pressure (intensified for the gay teacher)” (p. 649) when working with male students because of fears of homophobic cultural assumptions around pedophilia. Our concern is not with the accuracy or significance of their findings, nor necessarily with their additive approach, but rather that female teachers ceased to be relevant in the face of male experience, and were discussed only in reference to the women’s racialized experiences.

Intersectionality approach. Intersectionality, often attributed as an outgrowth of Black feminists’ work (e.g., Crenshaw, 1989, 1991; Lorde, 1984), argues that no one category, nor the summing of categories, can capture a person’s experiences; in short, the whole is greater than the sum of a person’s social categories. As a theoretical construct, intersectionality affirms the particularized, situated connections of many types of social and cultural categories amid “interlocking systems of domination” (hooks, 1989, p. 22). It follows that no one sociocultural identity can be extracted for examination without the simultaneous examination of other categories. As an individual’s intersections occur within a “matrix of domination” (Collins, 2009, p. 246), an analysis requires the researcher to engage in the difficult task of distributing his or her focus among social and cultural categories and attending to how they mutually shape and are shaped by one another in concert. Although no one study can hold every category in primacy constantly, our search indicated that in most studies using intersectionality (e.g., Johnson, 2007; Raible & Irizarry, 2007), discussion of the women teachers, themselves, via analyses of their gender, was repeatedly forgone in favor of analyses of other social markers.

For example, Asher (2007) questioned the productivity of multicultural teacher education courses that focus solely on race or culture with limited attention to gender, class, and sexuality. By supporting students in “coming out” (p. 67) about certain personal subjectivities through examination of “context-specific intersections of race, class, gender, sexuality, culture, language” (p. 68), Asher contended students would value complex identities deviating from social norms. Asher’s analysis addressed intersections of religion with race, regionality with race, sexuality-class-regionalism with race-class, and sexuality with religion, crossed with the discursive influences of capitalism and the region’s history with slavery. Despite the majority of the preservice teachers in the class being female, sex and

gender matters were not analyzed either separately or as an intersection with another social marker. The only examination of gender that went beyond the nominal (e.g., “The White women”; Asher, 2007, p. 67) was a point made using Eng’s (2001) work on the feminization and desexualization that Asian American males experience in the United States. This reference was used to illustrate othering but did not directly link to Asher’s data. In theory, Asher’s metaphor of coming out of closeted identities does not exclude addressing sex and gender. It may be unlikely that a transgendered individual would be in Asher’s multicultural course and would “come out” regarding sex. However, a student certainly could publically admit to gender pressures or transgressions of gendered expectations. Still, despite all the other complex intersections included, this type of gendered coming out was not presented, even as a thing that did not occur.

Three studies—McCray, Sindelar, Kilgore, and Neal (2002), Berry (2009), and Kohli (2009)—presented intersections of gender and race in ways that raised questions for us as researchers who are concerned that gender is continually being overshadowed by other social markers. As an illustrative example, Kohli’s study of 12 Latina, Black, and Asian American female preservice teachers used critical race theory (CRT) to analyze data from focus groups on race and racism. Kohli emphasized that, in line with CRT, “this study focused on race, racism and its intersection with gender and class in the lives of Women of Color educators” (p. 238); the participants’ own K–12 experiences provided insight into their students’ racialized experiences. For example, a participant recalled the low expectations school personnel placed on her and her Latina friends as students: that they would just get pregnant and not be successful. She linked this to her own students being called “hood rats” (p. 245), a slur indicating young Latinas were “loud, promiscuous and without ‘class’” (p. 246). Here, the intersection of gender and race at the K–12 level is clearly drawing on the racist, sexist, and classist depiction of an “oversexed, low-income Latina baby maker” (p. 246), but Kohli missed other opportunities to draw out gender-race explanations.

One of those lost opportunities involved a set of stories about participants’ K–12 engagement with competitive games and sports, which graze gender issues without substantial analysis. A Black teacher participant relayed her girlhood experience of besting a group of White boys at tetherball and being called “the n-word” by the losers (Kohli, 2009, p. 240). The history of hate speech heightens readers’ awareness of race issues involved, and Kohli surmised the boys were drawing on racist hate speech when “they felt stripped of their athletic prowess.” Perhaps Kohli was implying the boys’ displacement is a result of the gendered cultural stigma of losing to girl, but the author did not explicitly state this powerful gender-race intersection. Kohli did not frame athletics as a solely masculine domain, nor should she have, but the emphasis on race that characterized the analysis shadowed any gender-race intersection at the K–12 level.

This pattern is held at the teacher level, where Kohli (2009) clearly established a cycle of racism in teacher education but allowed gender and class to fall away. The apt treatment of race, gender, and class intersections seen elsewhere in the study is left wanting when looking at the women teacher participants. With so many social categories deserving of in-depth analytic attention, we wondered about the likelihood of researchers accomplishing the complicated goal of inter-

sectionality analysis without allowing one social category to be fronted. Furthermore, we wondered about the effects on a large scale when the pattern continually seems to be leading with race and placing other markers such as gender on the periphery.

Taking a progressive view on singular, additive, and intersectionality approaches is tempting, but inferring that singular is rudimentary, additive is more advanced than singular, and intersectionality is the most evolved of the three is an unwarranted conclusion. For example, the use of intersectionality in research does not automatically guarantee sound analysis across social categories, nor does the inclusion of intersections solve the original problems of the social hierarchy in which one social category is assumed to trump others.

Studies focused on students. The argument could be made that without students there are no teachers; therefore, student achievement and student effects should be the heart of any teacher research. A research focus on the teacher as professional adult, which teases apart where the teacher ends and the child begins, is not without merit. Still, our review revealed that in many articles seemingly about elementary teachers, analysis of femaleness and gender was not about the teachers at all, but rather about the elementary school-age girls in teachers' care, and then usually only when the girls were confronted with historically masculinized content and context.

For example, three studies centered on the science, technology, engineering, and mathematics (STEM) areas, and all acknowledged that STEM teachers are charged with introducing and engaging girls into the historically male-dominated disciplines. Battey, Kafai, Nixon, and Kao (2007) examined 170 professional development projects sponsored by the National Science Foundation and the American Association of University Women (AAUW) seeking to understand the impact of professional development focused on (a) raising gender equity awareness, (b) deepening content-area knowledge, (c) implementing best practices, and (d) inquiring into STEM areas. The projects that included all four of these topics were found to be the least frequent but the most likely to be integrated in students' curricula and to engage students in inquiry-based instruction, a STEM method that authors proposed as beneficial specifically for girls. The authors acknowledged that women's voices are silenced in STEM fields and noted the significance for girls in need of role models but stopped short of examining women teachers' experiences in the STEM fields.

In Barton's (1997) narrative exploration, she used her own gendered experiences as a science teacher and learner to draw conclusions about feminist liberatory science education's ability to increase science teachers' understandings of the exclusionary field. Barton called for science teachers to better use critique and discussions of positionality, and to challenge existing scientific language to create learning circumstances that give female and minority students better access to concepts and constructs. Again, important identity issues (e.g., positionality) were deemed relevant only when it came to student learning.

In the context of teacher education, Campbell and Sanders (1997) conducted a national survey of teacher educators to see how preservice methods courses address gender equity issues for K–12 students of mathematics, science, and technology.

They found that 72% of instructors of STEM methods courses include some gender equity topics (mostly through discussion) but do not give substantial time to them, despite 82% of respondents agreeing that gender equity topics should be taught in methods courses and 56% agreeing they should be a priority in teacher education. Women respondents had “significantly more positive attitudes about gender equity [topics] than men” (Campbell & Sanders, 1997, p. 72). Time was seen as a barrier to teaching gender equity as an issue for K–12 students but remained a relatively unimportant challenge to those who were committed to including it in their courses, raising the question about the institutional constraints that may be blocking university faculty’s attention to gender (Jennings, 2007), especially in the STEM fields, where widespread documentation exists that female students have been underserved (AAUW, 1992).

Outside the STEM fields, gender equity work was a notable and important focus, but the teacher herself was invisible. McIntyre, Chatzopoulos, Politi, and Roz (2007) engaged in a 2-year participatory action research (PAR) project to explore how preadolescent (9–10 years old) girls constructed knowledge of girlhood. The PAR team of three undergraduate elementary education majors, 12 preadolescent girls, and the research director met weekly and conducted presentations for college students, had discussions, and developed media projects about gender. Julieta, a Romanian-born female preservice teacher, reflected on her own language and new life in the United States to understand the students’ gender constructions. Anastasia studied her dialogue with the girls and how her position as a Greek female teacher and researcher informed her relationship with the students. Nikos, the only male in the group, was the only teacher researcher who used his collaboration to reflect on how his own gender (and other social markers) affected working with females at both the student and adult levels. Although the article by no means claims that gender exists only in difference (i.e., in female-male relationships), it may have been the difference of a male teacher (a minority in schooling) that made gender at the adult level recognizable. Such treatment creates a condition where female teachers register as important only if children are involved.

The structure of teacher education may focus on elementary student gender and gender effects as the preferred site of inquiry, especially as accountability measures and discourses increasingly demand concrete, if spurious, connections between student and teacher variables and discrete instructional outcomes. Vavrus (2009) examined an autoethnography assignment to explore teacher education students’ views of gender and sexuality. “As a result of their teacher education curriculum, including this particular autoethnographical assignment, all [38] teacher candidates expressed increased confidence in being able to consider issues of gender and sexuality as a legitimate part of their teacher identity” (Vavrus, 2009, p. 388). Notably, the purpose of the assignment was to explore gender and sexuality so that the teachers would be able to talk to students about these matters, and that focus reinforces the mind-set that the only reason to attend to teachers’ gender is for the instructional benefit of the students, despite the potential for teacher education to increase understanding of the influence of gender on teacher identities.

Studies focused on maleness. These articles that were actually about maleness fell into two groups: (a) literature around adding men to the ranks of elementary school

teachers to remedy a homogeneously female teacher workforce that may or may not be disserving male students and (b) articles about women leaving teaching to work in the masculine world of administration and therefore ceasing to be teachers in the sense of this review. In the latter group, the subject of study is not really the women who venture into the male administrative realm, but rather their strangeness in the normalized world of masculine work. In the former, the subject of study is not really the woman teacher but rather the boys in her classroom, or the men teachers who are so few in number. Although it is desirable for women to enter administration, just as it is desirable for men to enter the elementary teaching profession, this facet of the search suggests that maleness is treated as axial—that is, female factors cluster around and find relevance in relation to male factors. As a result, females emerge as gendered objects of inquiry (even indirect inquiry) only when they are actively pursuing either more masculinized work or acting on masculine subjects.

Men as remedy to the female teacher workforce. Many articles feature analyses of men in elementary teaching contesting hegemonic masculinity and the sexism, racism, and classism implicit in that model, as seen in Gomez, Rodriguez, and Agosto (2008). In this study, three Latino male preservice elementary teachers' experiences reveal their struggles with racism, popular cultural constructions of Latino men, masculinity, and a vocation in teacher education. All three participants noted that they struggled with the White female teachers in their company; these women's overall habitus contributed to "misunderstandings, leaving the young men feeling angry and disillusioned, and the White females feeling confused and upset as well" (Gomez et al., 2008, p. 279) and ultimately offended, in turn alienating their Latino classmates through their uninterrogated "dysconscious" (p. 281) words and actions. The young men also described more positive interactions with Latina preservice teachers, whose concerns and passions about teaching young children and experiences with racism echoed their own.

Raider-Roth, Albert, Bircann-Barkey, Gidseg, and Murray (2008, p. 446) formed a Teaching Boys study group of 13 pre-K–12 teachers, who "presented detailed descriptions of individual boys to each other and examined the questions of pedagogy, gender and identity" at play in building and sustaining relationships with boys. Findings suggest that teachers struggle to foster boys' individual development and identities while also acting as "forces of enculturation to make [their male students into] 'good boys'" (p. 446). This is further complicated by the negotiations teachers must perform to understand their own gendered identities and pedagogical goals while the boys resist both schooling and teachers themselves. The authors recommended that discussions of gender and relationships with students should become part of the professional conversation for teachers "to help teachers to learn to see their relationships with children and to see themselves and their students as individuals who wrestle with the socio-cultural forces of gender" (Raider-Roth et al., 2008, p. 447).

This work acknowledges, most importantly, that even female teachers seemed not to have the very language to describe themselves as gendered actors. Raider-Roth et al. (2008) wrote, "We noticed the paucity of teachers' references to their own gender identity" (p. 454). They continued,

It is important to recognize that while the majority of the group members were female, overt discussions about what it meant to be female in relationship to a male student were rare, there appeared to be resistance not only in looking at the boys' gender, but also that of the teachers. (p. 473)

This is not surprising, considering that a search for empirical literature on women teachers, specifically with regard to their gendered work, resulted in several articles about women only insofar as they relate to men, boys, and masculine fields of work.

In fact, in a 1997 nine-article, gender-themed issue of the *Journal of Teacher Education*, five of six empirical articles were about men. Some were outside the purview of this review, such as those about female secondary-level student teachers being sexually harassed by high school males (Miller, 1997) and male student teachers in secondary science addressing equitable teaching (Bailey, Scantlebury, & Letts, 1997). The others focused on male elementary teachers (DeCorse & Vogtle, 1997) and male students receiving the most attention in grade-school classrooms (Lundberg, 1997). Another article, titled "Gender and Cohort Differences in University Students' Decisions to Become Elementary Teacher Education Majors" (Montecinos & Nielsen, 1997), was framed through the experiences and earlier study of the male second author, himself a former elementary school teacher. Although Montecinos and Nielsen's (1997) work impeccably illustrates the issues around contemporary masculinity in the context of the feminization of elementary teaching, the "under-represented" male (p. 49), his aspirations and intentions, dominates the discussion. The women, their voices and perspectives, remained in the margins.

The complementary research on the women who lurk in the backgrounds of these articles about men is missing. This is not to suggest that Gomez et al. (2008) or others should have reported findings on the women in these particular articles, as that was not the purpose of their work. Instead, a complementary body of research on women teachers as gendered workers is needed. It seems that because women teachers are plentiful, they become the normalized, and constitute the mere background against which to depict males. Even nuanced portraits of men become men-doing-women's-work, making the ordinary world of women-doing-women's-work seem strange as a focus (Brookhart & Loadman, 1996). The gendered work lives of female elementary teachers are still viewed through the lens of men and maleness, as secondary subjects, and even through the voices of male researchers writing their own experiences navigating gender and power against a backdrop void of women's voices and experiences (Hayes & Kelly, 2000).

Women entering the masculine administration realm. Unlike men who enter teaching, women who are attempting to move from teaching to administration are never seen as a potential remedy or improvement by their very femaleness, and their movement is most often seen as an upward move from "just a teacher" (Quartz et al., 2008, p. 239). Here, as in so many contexts, the feminine and the feminized work world of the elementary-level teacher is pathologized by association in much the same way Etzioni (1969) and others assumed almost 40 years ago. Sherman (2005) directly addressed women's experiences in a district leadership program. This study begins by asking whether or not such a program, which focuses on preparing classroom teachers in that district to become administrators, significantly

affects the status quo and benefits the female participants. However, the program was beset with difficulties from the beginning: Very few classroom teachers participated, and in the end Sherman affirmed that the problem of women's underrepresentation in administration and their subsequent concentration in the teaching ranks may be bigger and more rigidly systemic than initially anticipated.

"Women," wrote Sherman (2005, p. 734), "although they clearly seek leadership positions, have been constrained by traditional norms surrounding educational administration in the district, indicating that problems are much larger in scope than can be 'cured' by district-led 'grow your own' leadership program[s]." The traditional norms constraining female participants include women's difficulty negotiating with an oppressive, masculine social control mechanism in schools, lack of support and mentoring, and the crushing weight of contemporary sexism:

[The women participants] struggled to gain concrete experiences considered to give them credibility with those in powerful positions while also fulfilling their responsibilities as mothers, wives, and teachers, even with full awareness that men are not always required to follow the same path. . . . Another participant put it this way, "The men are more respected just because they're men. I guess we have not outgrown that in our society yet." (Sherman, 2005, p. 727)

These studies provide a powerful illustration of women's experiences in masculinized work spaces.

Sherman and others (e.g., Christman & McClellan, 2008) noted the many years some women spent in the feminized classroom developing proverbial "street cred" in the hopes of moving to administration, but the lack of research on women's gendered experiences while in the feminized classroom makes it difficult to understand what feminization means in terms of comfort, safety, status, power, boredom, and so on. As per previous discussion, it is possible that these women teachers' experiences would most likely have not been the subject of empirical study had they not elected to strive to become administrators, to venture forth among the men and leave the confines of the feminized world.

She's Not There: Analysis of Relevant, Included Articles

Below we describe the ways in which the research on gender in elementary school teaching, although informative in a variety of ways, does not adequately address women teachers, who remain largely silent, absent, unnoticed, or disregarded as gendered workers and female beings. We acknowledge here, as well as at several other points throughout this discussion, that no single article can possibly address every possible participant factor or demographic finding—indeed, no article should. However, the larger pattern that underlies our central finding—that research on women elementary teachers simply isn't there—demands some exploration of how the research on gender and elementary teaching *is* focused.

Having excluded those articles that (a) lie outside our criteria, (b) include only a sentence or two devoted to demographics, (c) initially appear to address gender but simply do not for a variety of reasons, and (d) subsume the gender of women teachers while concentrating on other social categories, students, or males, our search yielded only 12 studies. Although a sample size of 12 does make it difficult to identify, much less explore, significant patterns, because we have documented

that the 12 articles we found constitute the entire body of relevant work on this topic, we can tentatively speak to the question at hand: What is the role of gender in research about elementary-level women teachers and preservice teachers in the United States since Acker's piece was published 15 years ago? We can also ask what have we learned about the gendered nature of women's experiences in elementary-level preservice and in-service teaching in that time. Certainly, given the radically small number of studies, it would appear that scholarly attention has been directed elsewhere, despite Acker's and others' (e.g., Sabbe & Aelterman, 2007) admonitions that research on teachers' work needs to account for gender in ways that do not take it for granted, nor yield to all-too-common sexist reductions.

As one result of the lack of scholarly attention on gender and women teachers, the task of creating meaning from the small group of relevant articles is complicated by the fact that 2 of the articles in this group of 12 appear to be derived from the same study. An analysis of the studies' use of theory, research questions, methods, and findings suggests that most, though not all, of the relevant studies present women's worlds of teaching as sites of struggle, deprofessionalization, marginalization, and co-optation. Notably, these qualities were revealed through studies that were not originally conceptualized to examine the experiences of women or teachers but instead stumbled onto the data. Exceptions to this trend could be found in the two articles about Black women teachers' teaching legacies. In the framing and execution of their research, these authors interpret participants with power and agency and teaching with generously constructed vocational wealth. These studies, although positive, still represented only 2 out of 12 studies in the group. We are therefore left with the observation that fundamentally, when it comes to serious study of teachers' work, most of the literature depicts the female teacher herself as marginalized, struggling, or absent.

Use of Theory and Literature

Following the example set by Singh, Allen, Scheckler, and Darlington (2007), we paid special attention to how each of the 12 reviewed articles used theory and literature to frame their work. As reflected in Table 4, the macro and midlevel theories in play included teacher professionalism (four articles), feminist and/or Black womanist theory (three articles), and other cultural, sociological, and critical theories (five articles). Although it is difficult to establish a pattern in the majority (five articles) because the range within those theories is great, the other two theoretical groupings are more significant. It is not surprising to find feminist theories in writing on gender and women in teaching; however, we were surprised to see that many articles drew from the teacher professionalism literature. As Gitlin (1996) suggested, teacher professionalism and the seemingly unending quest to professionalize teaching has not always been friendly to women, who dominate the lower echelons of the schooling status structure as classroom teachers, more often working with the very youngest children for the lowest compensation. Much of this literature has as its historical premise not the elevation of the teaching profession but rather the professionalization of work associated with women, and therefore deemed semiprofessional (Etzioni, 1969).

Wresting the elementary classroom from the clutches of women—by adding men, by changing its structure, by actively masculinizing the terrain, and infantilizing female teachers through surveillance-based accountability measures—may not

(text continues on p. 32)

TABLE 4
Relevant studies (n = 12) that meet our literature review criteria

Study	Use of theory and/or literature	Sample	Research question/purpose statement	Methods and analysis	Key findings
Bray (2004)	Liberatory pedagogy	N = 2. White female teachers (21/20 years old) who majored in mathematics and elementary education	“What type of preservice education do young women making the nontraditional choice of majoring in mathematics and elementary education experience? In what way does it inform their enactment of liberatory pedagogy once in service?” (p. 46).	Interviews, observation, and documents collected over a 2-year period; grounded theory analysis	New teachers experience being outsiders as women in math and math majors in education; their status as lifelong learners facilitated their enactment of liberatory pedagogy.
Bushnell (2003)	Teacher professionalism, panopticism	N = 9. New and veteran female New York City elementary school teachers; 4 Jewish, 1 Latina, 4 Italian or “American”	“This article maps a part of the current cultural landscape to illustrate how educational reforms subordinate teachers, particularly elementary school teachers, and reduce their opportunities for professionalism” (p. 252).	Observation, interview, document analysis	Educational accountability reforms and their accompanying surveillance mechanisms subordinate and co-opt elementary school teachers and reduce their opportunities for professionalism.
Cammack and Phillips (2002)	Poststructural feminist theory	N = 18. Elementary teacher education students enrolled in a gender issues course; 2 male, 16 female; 14 White, 2 Asian, 2 Latina	“What does it mean to wear the labels ‘teacher’ and ‘female’?” (p. 123).	Interview, autobiographical statements, and dialogue journals; discourse analysis	Preservice teachers are often unable to define themselves except by existing, limiting discourses. Participants saw teaching as acceptable work for women, and acknowledge the role of patriarchy in that work.

(continued)

TABLE 4 (continued)

Study	Use of theory and/or literature	Sample	Research question/purpose statement	Methods and analysis	Key findings
Dingus (2008)	Teacher socialization	<i>N</i> = 9. Black women from intergenerational teaching families, majority elementary	“How does family offer an additional perspective on how culture influences the professional socialization of intergenerational African American teachers? What forms of professional socialization occur among intergenerational teachers, and what does each generation transmit to the next? How do these familial relationships contribute to understandings of what it means to be an African-American teacher?” (p. 608).	Individual life-history interviews, and group conversations, and participant-generated writings; trilevel coding process	Black women are socialized to become teachers on an intergenerational basis, with an emphasis on collective social responsibility; teaching is seen as stable, respectable work in the midst of shifting expectations and possibilities for Black professionals.
Dixson and Dingus (2007)	Black feminist/womanist	<i>N</i> = 5. Black women elementary teachers	“How do family and culture influence the professional socialization of intergenerational African American teachers? What forms of professional socialization occur within teaching families, and how are they transmitted across generations? How do these relationships contribute to understanding what it means to be an African American teacher, and how do these conceptualizations reflect cultural values?” (p. 815).	Ethnography	Black women become teachers as a function of intergenerational encouragement from mothers and othermothers; teaching legacies are formed that support teaching as community work; teaching is a spiritual, nurturing practice and vocation.

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TABLE 4 (continued)

Study	Use of theory and/or literature	Sample	Research question/purpose statement	Methods and analysis	Key findings
England, Budig, and Folbre (2002)	Care, devaluation thesis: those who work in occupations involving care face a relative wage penalty	<i>N</i> = 10,670. Men and women in the 1979–1990 National Longitudinal Study of Youth	“[Do] those work[ing] in occupations involving care face a relative wage penalty?” (p. 455).	Quantitative. Survey; fixed-effects regression modeling	Care work, such as elementary teaching, pays less than other occupations. More women than men pay the wage penalty because more women than men do this work that is culturally associated with women thus devalued.
James (2010)	Care, mothering	<i>N</i> = 5. Four White, one Latina elementary school teachers	“[How is] the implicit relationship between mothering and elementary teaching informed by dominant constructs of caring” (p. 522). “How does mothering as a framework shape women’s experiences of teaching?” (p. 523).	Qualitative. Life history and focus-group interviews	“Assuming the role of mother to one’s students may not only devalue students’ identity and experience, but limit teachers’ ability to care adequately for themselves” (p. 522).
Landeros (2011)	Cultural capital, psychological entitlement, teacher professionalism	<i>N</i> = 16 elementary teachers, 14 mothers. One male teacher, all the others female; all participants were White, all mothers from affluent suburban U.S. community	“... How [do] mothers and teachers negotiate their relationships and socially construct their roles within the context of an upper-middle class, highly educated and competitive community” (p. 250).	Qualitative. In-depth interview	The parent-teacher relationship is primarily a relationship among women, and in an affluent community, entitled-minded mothers become competitive in a gendered fashion; mothers jockey for status and position, questioning female teachers’ authority and validity, and actively deprofessionalizing female teachers.

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TABLE 4 (continued)

Study	Use of theory and/or literature	Sample	Research question/purpose statement	Methods and analysis	Key findings
Phillips (2002)	Poststructural feminism	$N = 4$. Female postgraduate teacher education students enrolled in a gender issues course	“What are the complexities and dilemmas of being ‘female’ and ‘teacher’? How do discourses clash to dominate emerging subjectivities of preservice teachers thus identified? And what kind of space is necessary for such preservice teachers to deconstruct the meaning of these labels?” (p. 9)	Qualitative. Interview, observation, autobiographical statements and dialogue journals; discourse analysis	Being female and a teacher is largely defined by an array of dominant and competing discourses. Teacher education must create spaces for addressing individual gendered subjectivities beyond dominant discourses and definitions.
Quartz et al. (2008)	Teacher professionalism	$N = 838$. Early career urban educators from UCLA Center X Teacher Education Program; 79% female, 21% male; 31% White, 27% Latino, 6% African American, 31% Asian	“What proportion of teacher career movement within our sample was attributable to leaving teaching versus role changing?” (p. 218). What explains role changing?	Quantitative. Longitudinal study, survey; survival model analysis	Attrition is complicated by role-changing; men move “up” into administration at higher rates whereas women make perceived lateral moves or leave teaching.

(continued)

TABLE 4 (continued)

Study	Use of theory and/or literature	Sample	Research question/purpose statement	Methods and analysis	Key findings
Smulyan (2004a)	Teacher professionalism	N = 28. Female liberal arts college students interested in careers in either education (n = 15) or medicine (n = 13); 19 White, 5 Asian, 3 Latina, 1 African American; 26 heterosexual, 3 LGBTQ	“I examine how and why these women arrive at the decision to teach and how their choice is a conscious process through which they explore, modify and sometimes resist the gendered identity of teacher” (p. 514).	Qualitative. 10-year longitudinal interview study; narrative analysis	Choosing to teach is a negotiation with identity and gendered social expectation greatly facilitated by exposure to critical frames; teacher education should make spaces to critically address teaching as gendered work.
Smulyan (2004b)	Cultural production theory	N = 28. Female liberal arts college students interested in careers in either education (n = 15) or medicine (n = 13); 19 White, 5 Asian, 3 Latina, 1 African American; 26 heterosexual, 3 LGBTQ	“[How do] a group of college women actively construct definitions of themselves as teachers and doctors, definitions which illustrate the tensions they experience as they negotiate competing discourses of success, work, and a female self?” (p. 226).	Qualitative. 10-year longitudinal interview study; narrative analysis	Both women who become teachers and women who become doctors frame their work as dynamic but often within a similar discourse of care and “traditional” feminization.

be any scholar's overt project, but the overall flavor remains. In the studies here, professionalism is contextualized along with the decision to teach—choosing to teach (Smulyan, 2004a) and choosing to leave teaching (Quartz et al., 2008). All of this occurs against a backdrop of surveillance and control-oriented policies and reforms (Bushnell, 2003) as well as amid the neoliberal status jockeying of entitled suburban mothers (Landeros, 2011). So theory seems to be employed in couching teaching in the professionalism literature, at least in a few cases, to explain and describe difficult teaching situations for gendered care workers (England, Budig, & Folbre, 2002; James, 2010).

The exception here lies in the use of Black feminist and womanist theory by Dixon and Dingus (2007) and as an underpinning of Dingus's (2008) work on Black women teachers' socialization. As Dixon and Dingus (2007) wrote, Black feminism and womanism are profoundly agentive; the authors drew from the roots of Black women's experiences and spiritual beliefs and work to understand and affirm the need for political and spiritual actions on the part of and for Black families specifically and the downtrodden generally across community and institutional contexts to battle oppression and heal its harmful effects. So this theoretical frame can be interpreted as having been employed to understand Black women's experiences in teaching from an agentive political, intergenerational, and even powerful position.

Research Questions and Purpose Statements

An analysis of the research questions and purpose statements illustrates that the majority of studies (9) either were located in a preservice context or did not set out to examine phenomena related to women, gender, and teaching, but rather happened on such findings. Only one article was not about teaching, per se, but rather about the caring professions writ large with powerful findings related to elementary teachers as a subset of the larger group of respondents. The majority of the studies (5) focused on preservice contexts. In all of these, preservice women were choosing to become (or not become) teachers against a backdrop of gendered identity and vocational negotiation. Only two studies' research questions focused specifically on gender and involved female teaching populations (James, 2010; Landeros, 2011).

With regard to the four studies whose research questions do not mention gender or women as a variable of interest, it is possible that this is attributable to sampling, as the authors may have wished to phrase their research questions as inclusively as possible but then could find only female research participants. We strongly suspect this may be the case specifically with Dingus (2008) and Dixon and Dingus (2007), where the research questions do not specifically address women, but the methodological and theoretical frame as well as discussion of the findings speak specifically to Black women's intergenerational legacies in teaching. Furthermore, Dixon and Dingus positioned these two studies in the context of the unique tradition of research on Black women in teaching and in the research on feminization of the Black teaching force (Fultz, 1995); this contextualization and the ways in which these literatures might speak to mainstream studies on teachers, teaching, and gender render these studies a special case discussed at length later in this article.

Other research proactively addressed the feminized participant pool in analysis and discussion. For example, Bushnell (2003, p. 258) wrote,

All of the teachers in this study are female—a decision not made consciously for the purposes of the study but that resulted from the snowball method of sampling. Although the female informants do not reflect the existence of male elementary school teachers, they do reflect the preponderance of women in the profession . . . women populate more of the elementary school classrooms, whereas men occupy more of the secondary school classrooms.

So rather than seeming to disregard the fact that the participant pool was 100% female, as many excluded studies did, Bushnell affirmed that her work is in alignment with a larger national trend and, more important, proceeded to conduct an analysis based on gender. Some excluded studies that also found themselves with an entirely female participant pool neither mentioned this as anomalous nor conducted special analyses and discussion related to gendered findings.

Types of Studies

The vast majority of these articles were qualitative. The two quantitative survey method studies, notably, were those most removed from the areas of relevance, with research questions and overall study design specifically not about teaching (England et al., 2002) and not about women (Quartz et al., 2008). These had the largest sample sizes. The qualitative studies relied primarily on interview methods (10), with additional observational data collection (5) and document and artifact analysis (4). One study (Dixson & Dingus, 2007) employed ethnographic interviewing. The sample sizes in the qualitative studies were much smaller, ranging from 2 to 28. Three studies, one quantitative (Quartz et al., 2008) and two qualitative (Smulyan, 2004a, 2004b), were longitudinal, although the two qualitative studies were extrapolated from the same single data set. Although the included qualitative studies had a range of sample sizes, most of them were relatively small-scale projects, with 6 of the 10 having samples of fewer than 10 participants. Given the preponderance of women elementary teachers, it is noteworthy that the trend was in favor of small qualitative studies rather than large-scale quantitative studies.

Included studies: Struggles and legacies. To reiterate, such a small body of work makes it difficult to illustrate robust patterns among the included studies. However, there are two emerging trends that warrant notice despite the obvious necessity for further exploration and corroboration. These are that the research on women teachers focuses on (a) the struggle involved in women choosing—and not choosing—to become teachers, considering the gender marginalization and devaluation of the profession and women's own internalization of patriarchy, and (b) women constructing teaching as a spiritual, nurturing, even critical vocation rooted in strong feminine legacies. The former seems to be about rewriting a struggle, whereas the latter constructs teaching as a gift, able to be inherited and bequeathed.

Struggles in choosing or not choosing teaching. The majority of the relevant studies included here are about women negotiating a gendered work experience that is troubling, marginalizing, and low status. Indeed, some participants engage agency;

for example, Bray's (2004) math and elementary education majors are outsiders as women in the math department as well as marginalized as math majors in the education program, but they embrace and enact liberatory pedagogy as a way of connecting with their own students. However, for the most part, the women teachers in these studies are struggling. Even Bray's agentive participants seem to embrace liberatory pedagogy out of exhaustion, and reading about their experiences makes one wonder how many times they must have been asked why they would choose teaching when their content-area knowledge could open lucrative doors to other higher status and more lucrative professions. Elementary education's association with women marginalizes it as a major across the whole of the higher education system and society at large. So when women, who themselves are marginalized in mathematics, chose a marginalized major, Bray argued, these women searched for a new frame and found it, to some degree, in liberatory pedagogy. These female teachers found hope through a new approach to education, but they did not lose sight of the many outside forces at work, or the continued struggle at hand.

Such outside forces acting on female teachers include what Quartz et al. (2008, p. 236) called "traditional gender bias," which extends to the very structure of schools and schooling hierarchy and explains why there is greater attrition for female teachers beyond what can be explained based on their percentage in the profession. Male teachers are considered "role changers" (Quartz et al., 2008, p. 236), not leavers.

Assuming that most role changing is movement up the career ladder, men seem to be more likely than women to be promoted. Teaching has a long history as a female-dominated profession in which men have been overrepresented in higher status positions. Our research informs this trend. (Quartz et al., 2008, p. 236)

Men are encouraged to move up into the higher administrative rungs, whereas even the best female teachers are not similarly encouraged. They remain just teachers, something framed almost as a demotion.

Other forces are also at work; many preservice women engage in grueling negotiations about becoming a teacher and struggle with the tensions inherent in varying discourses around success, work, and femaleness. The compromises implicit in taking on gendered work and the questions around teachers' status and role in a patriarchal culture are most notable. Smulyan (2004a) contended that even though the young college-age women in her study "resisted the idea that teaching, as a 'women's profession was non-agentive'" (p. 523), they were faced with families, friends, and even their own internal narratives constructing teaching as a waste of an elite liberal arts education and a waste of intellect, creativity, and promise. As one participant in Smulyan's study said, "I thought, I can't be a teacher. I need to go do something that women aren't supposed to do" (p. 527). Smulyan observed that sometimes their parents commented on the cost of college in relation to their daughters' earning potential as teachers, suggesting the value of a less expensive institution for teacher training.

In addition to dealing with the imposed frameworks of others, many of these women also had to struggle with their own, internalized understanding of teaching as a gendered, low status profession. They faced the reality that they

would earn less than many of the other women who graduate from their college and that they would never receive the social recognition afforded to those in high status careers. (Smulyan, 2004a, p. 526)

Smulyan (2004a) and Phillips (2002) both made suggestions about how teacher educators might facilitate female teachers' critical examinations of what it means to work in the feminized profession. Smulyan (2004a) suggested that teacher educators "provide students with opportunities for critical examination of the teaching profession, of the position of women in the field of education and the larger society and of their own personal choices and conflicts as they explore possible roles in the field" (p. 540), with an aim toward becoming critical educators contending with the many messages they may be receiving around women, teaching, status, and gendered work. Phillips (2002) recommended creating spaces for talking about individual gendered subjectivities in teacher education, a point reiterated in Cammack and Phillips (2002).

Gender matters are woven through the same data set about which Smulyan (2004a, 2004b) asked how gender influences women's choices to become teachers and with which she juxtaposed women choosing to become teachers with those choosing to become doctors. She observed that whereas "doctors appreciate the respect they receive but question the power that accompanies it," teachers "struggle with the imposition of gendered expectations of low ability, low ambition, and lack of power that accompany what they perceive as a transformative and valuable social role" (Smulyan, 2004b, p. 242). Both medicine and teaching are helping professions, but both choices and careers are hardly on equal footing. Questioning the legitimacy of one's power is a very different thing than struggling with the lowered expectations surrounding female work. The former is imbued with a gracious feeling of not being deserving, whereas the latter is a fight for what one deserves. Fewer than 10 of the 28 respondents chose to become teachers.

Similarly, Phillips's (2002) participants chafe against being defined as primarily wives and mothers, and frame teaching as gendered work and a compromise, and therefore semiprofessional. One participant dreamed of being an attorney, in what Phillips saw as a rebellion against the role of wife and mother. Once an attorney, the participant realized that although she initially didn't want to "grow up to be like her mother and sisters as a wife at home," she now realized that aspiring to be a lawyer constituted a rebellion against "what I'm good at. Now I look back and I think that was just stupid because that's not me. And I have to do what's me" (Phillips, 2002, p. 17). According to the participant, what she's good at is ostensibly caring for children (i.e., being mother-like) and avoiding that destiny was a stupid undertaking. Phillips continued, "Note that a 'career' in this case is being a lawyer, not a teacher. As a teacher, she can act as a surrogate mother to children in her classroom and still be fulfilling the discourse's expectations for women" (p. 17). Cammack and Phillips (2002), who presented a different analysis of this same data set, saw these and other discourses as indicative of the powerful role of patriarchy in shaping teaching as "acceptable women's work" (p. 127) in the minds of teachers and teacher educators themselves, as well as in the minds of society at large.

Perhaps these trends contribute to the overall lack of empirical studies on women in teaching: So many of the included and excluded studies reviewed here

indicate in subtle and overt ways that studying women and gender in a feminized profession like elementary teaching is a “cool spot” (Peshkin, 1988, p. 18) for researchers. It is deemed uninteresting, predictable, low-status inquiry most of the time, except when something anomalous emerges: (a) math majors, who, as women in a significantly masculinized field are a rarity, and doubly rare for having chosen elementary teaching in lieu of the myriad options open to math majors; (b) men choosing to do women’s work; or (c) graduates of elite liberal arts schools choosing between higher status professions such as medicine and the virtual vocational cloister of teaching. Given England et al.’s (2002) longitudinal survey finding that care work—such as elementary teaching—pays workers markedly less than other occupations, the anomalous factor here constitutes the curious obsession with choice. Namely, one must ask why math majors, men, or graduates of elite colleges would choose teaching when they could do something else, considering the penalty in wages suffered by teachers, as the profession is associated with women and consequently devalued.

All of this comes to the fore in Landeros’s (2011) examination of how entitled-minded, affluent mothers actively deprofessionalize their children’s elementary school teachers in their struggle for status at the expense of female (and, importantly, not male) teachers. Although none of the teachers in Landeros’s study engaged in the mothers’ posturing, mothers and female teachers, both of whom are devalued as caregivers and care workers, are pitted against one another while larger issues affecting them both go uninterrogated. As Landeros (2011, p. 261) wrote, these

struggles for status camouflage real issues: the traditional division of labour which assumes elementary education is an occupation requiring the feminine trait of caring more so than professional training, the ambiguous feelings toward working mothers in society, the relationships of power surrounding the definitions of motherhood, and the supposed dichotomy of the public and the private sphere—as well as any dialogue toward finding a solution.

This theme is pursued in James’s (2010) study, in which mothering proves to be a dangerous construct for understanding the female teacher’s work, one that imperils both the children and the teacher herself. The historical analogy of teacher-as-mother must be thrown off, but there are few narratives to replace it. As one of James’s (2010, p. 525) participants said, “It’s a ‘no-win’ situation if you ask me.”

Legacies of teaching. Although most of the studies discussed above frame the experiences of women teachers as negotiations and attempt to reframe or reject work that is synonymous with marginalization and low-status drudgery, the Dingus (2008) and Dixson and Dingus (2007) studies position gender and teaching very differently. For example, Smulyan (2004a, p. 522) observed that few of her participants

came to college expecting to teach; many dragged their feet as they considered the possibility, resisting the idea that they (like some of their grandmothers, aunts, mothers) would fall into what they initially saw as the easy and stereotypical path of teaching.

Although Smulyan's and others' participants underwent shifts in their thinking about teaching as gendered work, the feeling of unhappy, ultimate resignation remains a palpable energy.

Meanwhile, Dixson and Dingus (2007) described participants who became teachers for the very reason that their mothers had been teachers; one woman went back to teach at the very school where her mother taught for nearly three decades, emphasizing intergenerational connection with herself and other Black women educators, as well as community engagement:

[Teaching at this particular school] is about me and understanding me, and appreciating me and what I have here that I bring, and I try to present that and stand before my kids with. That's why I wanted to come to [the school] not this savior mentality, but it started with me, like I wanted to go back to where I can start to learn more about me. I can be back in a community where I can continue on my own journey and then that will no doubt, play a role in the classroom. (Dixson & Dingus, 2007, p. 826)

Dixson and Dingus (2007) and Dingus (2008) offered analyses of life history narratives and other qualitative data sources from generations of Black women in intergenerational teaching families, illustrating how Black women are socialized as teachers as a function of tending their mother's intellectual, vocational, and spiritual "gardens" (Dixson & Dingus, 2007, p. 807).

Along with a teaching legacy, the women also inherited collective social responsibility that is vocational as well as gendered, with encouragement from their mothers and other women who "function as 'othermothers,' or those engaged in cultural traditions of shared mothering responsibilities, with attention to the collective well-being" (Dixson & Dingus, 2007, p. 810). Both articles emphasize the intersectionality of gender, race, and class, but do the difficult work of positioning each as analytically important and framing teaching as gendered work without being devalued as women's work. That said, neither of the authors romanticized the legacy of racism as it has, and continues to, affect women's work worlds. Dingus (2008) paid special attention to the ways in which the expectations and possibilities for Black professionals, and the socialization of Black women teachers, have shifted in specifically raced and gendered ways. For example, in his analysis of vocational motivation, Dingus found that although many Black women chose to become teachers because of "familial recognition of teaching as culturally grounded, political work characterized by community connectedness" (p. 612), job security, and perceptions of community and general groundedness associated with teaching were also attractors given "the stabilizing aspects of teaching in light of the nebulous forms of exploitation Black women encountered in the workplace" (p. 615).

As Ladson-Billings (2009) wrote, "If we believe that Black women are overbearing, deceitful, lacking moral values, or incompetent, how likely are we to entrust them with teaching children, particularly children from White middle-class families?" (p. 94). Much of the research on women in teaching focuses on White women in teaching, and the rich tradition of work around Black women teachers becomes marginalized (Foster, 1998). This pattern may be attributable to the large numbers of White women in teaching, and the justifiable scholarly alarm around a demographic divide wherein young White women from suburbia are increasingly the predominant teachers of urban children of color, to both the benefit and

detriment of all involved (Galman, 2006, 2012; Gay & Howard, 2000; Saffold & Longwell-Grice, 2008). However, none of these factors accounts for the racism and sexism at play in how Black women teachers are marginalized in mainstream culture and related scholarship.

Although mostly historical in nature (and therefore excluded as nonempirical), the literature on Black women teachers was plentiful in our initial searches. However, as Fultz's (1995) historical analyses suggest, even this body of literature has failed to address the historical and contemporary trends of feminization across the cadre of Black teachers. Therefore, research presenting the legacy of teaching as both a rich positive inheritance and a historicized tradition involving racism and sexism would be highly instructive for teacher research and teacher education as a field.

Discussion

In response to our research questions (What is the role of gender in research about elementary-level women teachers and preservice teachers in the United States since Acker's (1995–1996) piece was published more than 15 years ago, and what have we learned about the gendered nature of women's experiences in elementary-level preservice and in-service teaching in that time), our review tentatively suggests that although there are empirical studies about gender, the overwhelming majority do not address gender vis-à-vis the female elementary teacher. We have illustrated some patterns among the excluded articles to illustrate the absence of women from the empirical literature and have also sketched out some of the contours of the very small body of work in which women do appear. The discussion that follows further explores these trends and elaborates on possible implications of our findings. We begin with a discussion of methodological trends, followed by an exploration of the complex exclusions and some theorizing about the dearth of U.S.-based research in this area. The article concludes with possible directions for future research.

Methodological Trends

As detailed in the previous sections, we found that most of the studies were qualitative in nature with very small samples. Although we certainly cannot speak definitively to this pattern, it is possible to offer some speculation. Perhaps it is difficult to fund large-scale research on gender in education, or perhaps because so little research has been done, scholars are primarily asking questions about gender that are best explored through smaller-scale qualitative inquiries. An examination of the research questions across the 12 relevant studies reveals them to be descriptive investigations that, although methodologically robust and appropriate, merit supportive notice.

Other reviews of similar bodies of research may also provide some tentative clues to the methodological trends we observed. Most notably, Sabbe and Aelterman's (2007) review of the literature in an international context grouped research on the topic into two groups: (a) sex differences research, which is based on essentialist ideas of an individual's sex (i.e., male-female dichotomy) or socialization according to sex determining gender, and (b) gender dynamics research, which is based on constructionist ideas of active, multiple, and sometimes contradictory social and cultural influences on gender. We excluded what Sabbe and Aelterman considered sex differences research for the same reason that they found,

which is that this research by and large does not provide insight into gender. Excluding sex differences research likely reduced the number of survey studies, evaluations studies, experiments, studies based on observations of teachers, and studies of pupil effects. Its inclusion may have favored life history narratives, in-depth interview and group discussion studies, self-study, research based on personal reflections, examinations of visual, lingual, and ethnographic artifact analyses (e.g., photographs, diaries, television programs), and research with relatively small sample sizes.

Complex Exclusions

Again, we cannot overemphasize how surprised we were by the size of the relevant article pool after all exclusions were accounted for. With only 12 articles to examine, we felt compelled to devote significant analytic energies toward an exploration—and possible explanation—of the exclusions. Although the simple exclusions require little in the way of justification, the 42 complex exclusions remain analytically significant, especially as they speak to the research question at hand. It is inadequate to simply observe that there is little research on women in the feminized profession of teaching; we must engage with the extant research, even at the margins of this topic, and in doing so sketch out where research efforts do appear. In this sense and because these excluded studies are informative despite being tangential to our focus, we affirm that they make a limited contribution to explorations of gender and women elementary teachers. The nature of these exclusions, their application, and some reflections on the empirical field in light of our discoveries are of note.

Lost at the Intersections

Intersectionality has been used to explain individuals' complicated, multitiered social identities and experiences. Implicit in its use is the premise that individuals are constituted by socially and culturally constructed categories, such as gender, race, class, sexuality, nationality, age, ability, ethnicity, and so on. However, instead of considering the separate and often unduly isolated influence of each of these descriptors, an intersectional approach maintains that these markers act and interact on multiple and simultaneous levels to orchestrate a person's experiences or privilege and oppression, as well as personal and sociocultural understandings in dynamic ways. As a tool for understanding identity and experience, intersectionality can be a powerful concept, although there are certainly caveats about its potential misuse (Siltanen & Doucet, 2008).

Evidence also exists that the topic of gender practically and theoretically influences research on social categories in teacher education, but gender remains part of the supporting cast and not top bill. Pollock, Deckman, Mira, and Shalaby (2009) traced the terms *everyday feminism* (Mansbridge & Flaster, 2007), a term to describe everyday acts against gender inequality, and *everyday antiracism* (Lamont, 2000a, 2000b), a term to describe everyday acts against racial inequality specifically in education. Pollock et al.'s investigation found that students experienced tensions surrounding their personal action, empowerment, and capabilities regarding everyday antiracism. Some faculty and students expressed that issues of ableism, sexism, or heteronormativity demanded more attention than was given in the program and that the everyday antiracism course's emphasis on racism

overshadowed these other “isms.” The article made little other reference to gender issues, except to argue that working through racial tensions may translate to a willingness to work through other types of inequality in education (e.g., gender, sexuality, language). Working against gender inequality served as an inspiration for the diversity course and offered a possible by-product of the course, but gender remained a fringe topic.

In this review, it is possible that our keen interest in gender and women in particular created conditions where the experiences of female participants seemed muffled despite authors’ appropriate and justifiable focus on other arenas of analysis. However, although femaleness appeared in many studies as a keyword, rationale, and sampling factor, it was unexplored or frequently subsumed in favor of other analytical axes, most notably critical analyses of race. The pressure to employ a progressive and powerful tool like intersectionality may result in inaccurate keywords and incomplete analyses of gender. Publishing with truncated page limits, tight review timetables, and other factors may create circumstances where authors are not able to delve fully and completely into every aspect of intersectionality and identity they wish. However, we still found that, as an overall trend, researchers positioned race as a primary category of analysis, although gender was not as frequently discussed without being part of and frequently lost in a larger discussion of intersections with other social identities and analytic categories.

We do not mean to imply that the only adequate treatment of gender is a nonintersectional one. As McCarthy (2003) noted, it is difficult, if not impossible, to consider the gender variable without also considering it in the context of race (and class, sexuality, and similar categories). However, an attempt at examining intersectionality may actually fail to adequately address gender, subsuming it under a race analysis despite the best of intentions. This claim must be tempered by considering the long history of research on teachers (and in general) that ignored Whiteness altogether. In the case of the White women who dominate elementary school and early childhood teaching contexts in the United States, the monolithic nature of Whiteness is nearly always assumed, with some notable recent exceptions (Galman, Pica-Smith, & Rosenberger, 2010). Understandably, the emphasis on race may be an attempt to address and acknowledge the historical and contemporary impact of race and racism, and the historical dominance of Whiteness in research on teachers. However, it is possible that such an emphasis could play into the trap of competitive identity categories within a hierarchy. This hierarchy tacitly pits subjectivities against one another, so individuals must compete to establish themselves as the most oppressed, instead of better understanding themselves and others as occupying a unique combination of experiences.

Girls, Not Women

Several studies approached female teachers only through the lens of their pupils’ experience. These were typically female pupils in the abstract, cast predictably as girls struggling in the STEM disciplines who could be helped through teachers’ implementations of gender equitable instruction. The long history of female teachers being constructed as indistinguishable from the children in their care is in part a function of the historical shift in the teachers’ role. As elementary school teaching became more distinctly feminized, there was some concern that female

teachers could not physically regulate children as effectively as men (Biklen, 1995). It is not surprising that the role of the elementary teacher was at that point transformed from the disciplinary controller of bodies and behaviors to that of a supportive mentor who controls students via more pastoral, seemingly gentle mechanisms (Schutz, 2004). Subsequently, good female teachers in the United States were (and are) constructed as gentle guides, caregivers, and even babysitters, instead of authority figures. In spending most of their day with students, an elementary-level teacher's primary worth has historically been in relating to and with children, and in many ways becoming both consumable by the child audience and child-like herself in demeanor, dress, and status (Alsop, 2006; Biklen, 1995; Lightfoot, 1978, 1983; Weber & Mitchell, 1995).

Similarly, the professional rewards for female elementary teachers are located almost exclusively in relationships with the children, such that the children themselves are often considered the reward (Lortie, 1975) in lieu of monetary gain. Discounting teachers in this way is gendered, and may apply only to female teachers, as men make more money across the board. Even within elementary teaching, males in elementary education made on average \$6,000 more (\$45,000 vs. \$39,000 per year) than females in the same field, and "in spite of much larger numbers, women [who major in education] make, in the aggregate, \$8,000 less than men" regardless of specialization (Carnevale, Strohl, & Melton, 2011, p. 99).

In oft-cited literature as well as recent history, the top indicators of teachers' job satisfaction were "knowing that [they] have 'reached' students and [students] have learned" and the "chance to associate with children or young people" (Lortie, 1975, p. 105), a mind-set that has been found to persist (Marston, 2010). The satisfaction associated with professionalism or pedagogy or even the self-satisfaction of a rewarding vocation is difficult to disentangle from affective entwinement with children. This entwinement puts teachers at a marked disadvantage as they interact with other adults. Female teachers, existing as they do in the liminal space between adult and child, have complicated relationships with adults, but even those relationships are presented in relation to students' school experience and learning (see Biklen, 1995).

One is left to wonder what this means for teachers as they attempt to advocate for themselves as workers in the bureaucratic minefield of the contemporary accountability-driven school. If only the children (and the children's measurable, testable academic progress) count as valued currency and more school districts replace teachers' professional discretion with scripted, *teacher-proof* curricula, the teachers themselves become disposable at best, vilified at worst (Abramson, 2010; Dworkin, 1987; National Council on Teacher Quality, 2010; Thomas, Wingert, Conant, & Register, 2010).

This becomes a gendered issue for the simple reason that the overwhelming majority of the workers facing these and other dilemmas are female, although, as we have demonstrated, the woman teacher is largely ignored in empirical work. So the (mostly women) teachers positioned as quasi-adults are relegated to child-like status. Such status comes with less clout in the adult world and less ability to advocate without some form of institutional assistance. This assistance can also come from professional unions through formalized grievance processes meant to work toward protected worker's rights, but even this protection is not without difficulty. Recently, collective bargaining

in the United States has faced a historic backlash in states such as Wisconsin and Ohio, where legislation was accepted to repeal collective bargaining rights on employment conditions and compensation. Historically, unions established women educators as leaders in professional activism (Gitlin, 1996); the removal or weakening of unions limits teachers' avenues for advocacy. If unable to advocate for themselves, teachers may be forced to rely on powerful, potentially coercive others to speak for them, like a parent who speaks for a child.

Axial Maleness

Women's experience has been, and continues to be, measured out in comparison to men and male achievement, even in a feminized profession. For example, one of the authors recently gave a lecture about women and elementary teaching. After speaking for over an hour on the topic, she opened the floor for questions. Every question from the faculty and students in attendance was not about the topic at hand—women—but rather about men. After entertaining questions about men for 45 minutes, she stopped taking questions to observe that even though the presentation was about women, the research about women, and the conclusions about women, all she had done for nearly an hour was talk about men, without a single question about women. Although it is understandable that people would want to know where all the men have gone after learning about trends in feminization, that the audience had no questions about women except in relation to these missing men was troubling.

With regard to this review, it is not surprising that a search including the terms *gender* and *elementary teaching* would yield quite a few articles about men in teaching. However, what is somewhat more unusual is that searches including the terms *women* and *elementary teaching* would also yield a group of articles about men. It is possible that in the United States, affirmative action—the adding of underrepresented groups to a workforce instituted by Executive Order No. 10925 in 1961—contributed to a mind-set that it is a remedy for social woes and a step toward a more just world. As affirmative action became less supported by public opinion and judicial action, employers and educators increasingly adopted the concept of diversity as a rationale to enrich group dynamics in schools and the workplace (Harper & Reskin, 2005). Taking this approach, the inclusion of males as teachers in settings where women teachers are the majority (e.g., elementary schools) was seen as a remedy to a homogeneously female teacher workforce.

It is interesting that although the literature we came across on bringing women into the administrative tier does not foreground the inclusion of women as a remedy for masculinization, the literature we found on bringing men into the feminized terrain of elementary schooling does use the discourse of malady and cure, or amelioration by masculinization. This framing presents an unwinnable situation for men and women alike, as Martino (2008) wrote, presenting “men as victims who are in need of affirmative action initiatives to increase their presence in a female-dominated world where boys are being deprived of suitable role models” (p. 192).

Concern about boys is genuine; the perceived feminization of elementary and university classrooms, the overrepresentation of male students in special education and behavioral remediation, and worry about trends in violent masculinity drive a

great deal of the “boy turn” (Weaver-Hightower, 2003) or “boy panic” literature. Much of this focus on boys is driven by misguided interpretations of perceived feminization. As Drudy (2008, p. 313) wrote,

There has been a tendency among journalists, policy-makers and other social commentators, to connect the issue of boys’ performance in schools with the feminisation of teaching [and] in some cases female teachers have been used as a scapegoat for boys’ perceived underachievement.

For example, female teachers are believed to unfairly advantage female students, such that females are enrolling in colleges and universities at a higher rate than are their male peers. However, on closer inspection, those same female students are still completing their degrees, especially in the highly lucrative STEM fields, at lower rates than males and typically earning less than their male age mates long after graduation (Carnevale et al., 2011; Hill, Corbett, & St. Rose, 2010; Institute for Women’s Policy Research, 2010; Planty et al., 2009).

However, as Weaver-Hightower (2003) suggested,

We should, however, take care to avoid a kind of “zero-sum” thinking in this matter, for just as feminist scholars argue that girls have not benefited in education at the expense of boys . . . attending to boys’ concerns does not necessarily mean taking from girls. In fact, some practice-oriented researchers have been careful to state their aims explicitly to avoid harming the achievement of girls. (p. 487)

We remain curious about the ways in which female teachers are encouraged to adapt to male students and even to take partial responsibility for male behavior patterns, and what kinds of related admonitions are directed at male teachers.

Finally, we are in no way claiming that male elementary teachers are unaffected by gender, but the fact that so many articles in our search about women, gender, and teaching were in fact about men gave us pause. Sabbe and Aelterman (2007) found the inverse: that most of the literature “mainly focuses on female teachers [and several studies] clearly prove that male teachers are also burdened with gendered discourses that define them in certain ways and determine their roles” (p. 530). In general, Sabbe and Aelterman found that constructionist research deconstructed mainstream research. They outlined research that described female teachers within a mothering discourse and male teachers as counter to traditional feminine nurturers or as embodying traditional male role models.

Constructionist research also investigated gendered division of labor, which for male teachers largely adheres to tasks and job assignments that bank on assumed masculinity and power. We agree with Sabbe and Aelterman (2007) in affirming that even among this group of complex excluded articles, the men featured in them are absolutely burdened with such discourses and must negotiate daily the expectations associated with hegemonic masculinity in U.S. culture. However, we also feel that maleness is not always used to complement work on women and femininity. Instead, we found that maleness rapidly became a focus point in most cases, especially against a backdrop of less—not more—research about women in teaching. That Sabbe and Aelterman’s results differed from ours may in part be explained by how they bracketed their work; they included a larger array of studies, including international, nonempirical, book-length, and older work that predates the 15-year post-Acker context we explored.

Locating the Findings in the U.S. Context

Reflecting on our central findings, Acker's (1995–1996) earlier work, Sabbe and Aelterman's (2007) international review, and the trends we discovered in the exclusion analysis, we must characterize the shortage of research on women teachers and gender as a U.S. phenomenon. During the first round of exclusions, we removed all studies that were nonempirical, were not within the desired 1995–present publication dates, or did not address a U.S. sample. We observed that the overwhelming number of exclusions came in the last category, as we frequently came across studies that met all other qualifications and explicitly addressed our topic of women elementary teachers and gender but took place in non-U.S. (mostly the United Kingdom, Ireland, Australia, or Canada) contexts and had to be excluded. Although we did not keep exact records of the disqualified articles at the first tier of what we called simple exclusions, we suspect that had our review included international work, the volume of relevant articles gleaned for content analysis might have significantly altered our final results.

We remain perplexed as to what factors might contribute to this trend, but we can put forward some very tentative theories. Among them, the unique political and historical moment in which the United States found itself from the late 1990s through the present may be at least in part to blame. This period, which began with the so-called Bush-era conservative renaissance on many college and university campuses and ended with a recessionary funding crisis, laid the groundwork for neoliberal, postfeminist, and teacher professionalization discourses (Aronson, 2003; Douglas, 2010; Hall & Rodriguez, 2003; Nail & McGregor, 2009). Some postfeminist discourses, which claim that the work of a reified uni-focused feminism is *done* and that gender parity has been achieved, are particularly troubling. According to the U.S. Economic and Social Council (ECOSOC), it is in developed nations “where basic gender equality appears to have been achieved, [that] the battlefield has shifted to removing the more intangible discrimination against working women” (Lopez-Claros & Zahidi, 2005, p. 2). This pattern is evident in women's absence from the leadership tiers of major corporations, law firms, school districts, and the like, as well as miserly U.S. maternity leave policies. As a point of example, recent ECOSOC figures

indicate that the vast majority of the world's countries offer paid maternity leave, often with a guaranteed wage of 50–100% of salary. Interestingly, the United States offers women 12 weeks, but with no pay whatsoever, putting it in league with Lesotho, Swaziland and Papua New Guinea. (Lopez-Claros & Zahidi, 2005, p. 4)

Even then, the maternity leave is not granted in every state and not in every case.

It is possible that the general political, social, and cultural climate in the United States may have made more of an impact on the terrain of inquiry than we initially thought. As a U.K. gender scholar, Drudy (2008) wrote that although the United States has one of the highest rates of feminization in its schools, U.S. research is relatively silent on the topic, devoting its energies to “highly politicized debates on professionalism in teaching [which] have focused more on teacher education than on feminization” (p. 318). It may be safe to say that the U.S. track record for addressing gender equity and equal rights for women is less than stellar: The 2010 report of the World Economic Forum (WEF; Hausmann, Tyson, & Zahidi, 2010)

positions the United States on the lower end of some surprising scales. The WEF index comprises scores in women's health, education, political empowerment, and economic participation, and the United States is ranked at 40 for women's political empowerment (Uganda, for example, is number 29), 38 for health and survival, and 64 for economic participation. The report continues to suggest that although for the first time in several years the overall U.S. ranking improved to 19 in 2010 (it was 38 in 2009), this improvement is a recent reversal of a well-established historical pattern and offset by significant wage inequality. The overall status of women in the United States is still in need of attention.

Similarly, unlike most Nordic and European countries, the United States does not have a ratified equal rights amendment, despite laboring in this direction for nearly 90 years. Although the reality of misogyny in the United States is certainly not a matter of debate (Loers, 2007), and we do not imply a direct relationship between the status of women in the United States and the proportion of educational research on gender that speaks to the experiences of female teachers, the WEF index scores speak to a U.S. context characterized by inattention to women that, at least in sentiment, is akin to the observations made in this review.

Recommendations and Conclusions

Considering the tentative results of our review, it goes without saying that we recommend additional research into the uniquely gendered experience of the female teacher at work in feminized elementary teaching contexts. We further suggest that research energies be devoted to a deeper understanding of the experiences of women teachers from a range of sociocultural locations; even the ubiquitous young, White, middle-class female teacher remains a veritable unknown, so commonplace she is forgotten and spoken for.

Similarly, it might also be useful to examine the gendered and feminized experiences of the elementary-level teacher educator, most of whom are also all White and female (Grant & Gillette, 1987) and are doing the lowest status work in the academy, or what Liston (1995, p. 91) calls the "domestic labor" of schools of education. Although there is already an excellent body of self-study work among teacher educators, additional larger-scale inquiry is needed to explore the relationships between how gender and work are conceptualized, embodied, and communicated by teacher educators as they try (or don't try) to critically talk about gender with their largely female preservice cohorts.

Many of the relevant studies included in this review recommended that gender be included as a key topic for discussion in teacher education contexts (Bray, 2004; Cammack & Phillips, 2002; Phillips, 2002; Smulyan, 2004a, 2004b). This recommendation implies that in these research sites, as well as ostensibly in others, gender is not discussed any more than it is an area for scholarly inquiry. There is a real cost to not examining gender as a reality for women who work in schools. The foundations for internalized sexism are already in place by the time young women enter teacher education programs, as evidenced by many teacher educators who find their preservice women (and men) resistant—even hostile—to anything except a "postfeminist" and genderless interpretation of their work (Abt-Perkins et al., 2000; Galman, 2012; Titus, 2000). Drudy (2008) suggests that "gender issues are either low on the agenda of teacher education programmes . . . engender

resistance . . . or require careful handling in order not to generate fear” (p. 313), as is the case for many teacher education programs’ attempts to adequately address racism (Galman et al., 2010).

Finally, as noted in our methodological observations and exclusions discussion, it is entirely possible that before recommendations for more research on women teachers’ gendered experiences can be realized, there are larger questions about research that must be addressed. We observed that most of the relevant studies included for review were small-*N*, qualitative endeavors that, although of high quality, may have been produced with minimal or no funding. We also observed that there were many nonempirical thought pieces on women and teaching among our simple exclusions. These observations point to the possibility that structural elements in place in the educational research community may constrain the kinds of research that gets done, either via restrictions on and scarcities of funding sources or through larger epistemological assumptions around what constitutes legitimate scholarly inquiry, the nature of empiricism, and the means by which we prepare future researchers.

In the end, we find ourselves offering a description and analysis mostly of what’s missing from the extant empirical literature rather than an analysis of what is actually there. As M. Young (2005) described in her interpretation of the similarly dwindling interest in research on women in educational administration, the overall picture of structural misogyny in the United States, postfeminist discourses, the shift in concern to the boy panic literature, and the endless studies in which women are absent but maleness is axial, as well as a tacit acceptance of elementary classrooms as feminized ghettos are all part of a backlash in both scholarship and the culture writ large. There is a “powerful parallel narrative” (M. Young, 2005, p. 31) to the contemporary story of women’s educational attainment and success. This narrative emphasizes “the ‘success’ that women and girls are experiencing” (M. Young, 2005, p. 31) and its purportedly negative impact on boys and on women’s own children, marriages, fertility, and general happiness and satisfaction. Such narratives “are part of a political and social backlash against efforts to increase understanding and improve the conditions of girls and women” (M. Young, 2005, p. 31). Increasing our understanding about the many women who work in elementary school classrooms cannot be achieved without a research focus that includes women’s experiences as more than an afterthought, backdrop, or demographic footnote.

Note

Although we realize the necessity for a final author order, we acknowledge that each author contributed equally to the review and manuscript preparation.

References

- Abramson, L. (2010, June 2). In teacher layoffs, seniority rules. But should it? *National Public Radio*. Retrieved from <http://www.npr.org/templates/story/story.php?storyId=127373157>
- Abt-Perkins, D., Hauschildt, P., & Dale, H. (2000). Becoming multicultural supervisors: Lessons from a collaborative field study. *Journal of Curriculum and Supervision, 16*(1), 28–47.

- Acker, S. (1995–1996). Gender and teachers' work. *Review of Research in Education*, 21, 99–162. doi:10.2307/1167280
- Alsop, J. (2006). *Teacher identity discourses: Negotiating personal and professional spaces*. Mahwah, NJ: Lawrence Erlbaum.
- American Association of University Women. (1992). *The AAUW report: How schools shortchange girls*. Washington, DC: American Association of University Women Educational Foundation.
- Apple, M. (1995–1996). Introduction. *Review of Research in Education*, 21, xi–xviii.
- Argent, R. (1964). She's not there (Recorded by The Zombies). On *Begin here* [LP]. London, UK: Decca.
- Aronson, P. (2003). Feminists or “post-feminists?” Young women's attitudes toward feminism and gender relations. *Gender and Society*, 17, 903–922.
- Asher, N. (2007). Made in the (multicultural) USA: Unpacking the tensions of race, culture, gender, and sexuality in education. *Educational Researcher*, 36, 65–73.
- Bailey, B. L., Scantlebury, K., & Letts, W. J., IV. (1997). It's not my style: Using disclaimers to ignore gender issues in science. *Journal of Teacher Education*, 48, 29–36. doi:10.1177/0022487197048001005
- Barton, A. C. (1997). Liberatory science education: Weaving connections between feminist theory and science education. *Curriculum Inquiry*, 27, 141–163. doi:10.1111/0362-6784.00045
- Batthey, D., Kafai, Y., Nixon, A. S., & Kao, L. (2007). Professional development for teachers on gender equity in the sciences: Initiating the conversation. *Teachers College Record*, 109, 221–243.
- Berry, T. R. (2009). Women of color in a bilingual/dialectal dilemma: Critical race feminism against a curriculum of oppression in teacher education. *International Journal of Qualitative Studies in Education*, 22, 745–753. doi:10.1080/09518390903333913
- Biklen, S. K. (1995). *School work: Gender and the cultural construction of teaching*. New York, NY: Teachers College Press.
- Bray, P. (2004). Young women majoring in mathematics and elementary education: A perspective on enacting liberatory pedagogy. *Equity & Excellence in Education*, 37, 44–54. doi:10.1080/10665680490422098
- Brookhart, S. M., & Loadman, W. E. (1996). Characteristics of male elementary teachers in the U.S.A., at teacher education program entry and exit. *Teaching and Teacher Education*, 12, 197–210. doi:10.1016/0742-051X(95)00031-E
- Brown, C. P. (2010). Children of reform: The impact of high-stakes education reform on preservice teachers. *Journal of Teacher Education*, 61, 477–491. doi:10.1177/0022487109352905
- Bushnell, M. (2003). Teachers in the schoolhouse panopticon: Complicity and resistance. *Education and Urban Society*, 35, 251–272. doi:10.1177/0013124503035003001
- Cammack, J. C., & Phillips, D. K. (2002). Discourses and subjectivities of the gendered teacher. *Gender and Education*, 14, 123–133. doi:10.1080/09540250220133987
- Campbell, P. B., & Sanders, J. (1997). Uninformed but interested: Findings of a national survey on gender equity in preservice teacher education. *Journal of Teacher Education*, 48, 69–75. doi:10.1177/0022487197048001010
- Carnevale, A. P., Strohl, J., & Melton, M. (2011). *What's it worth? The economic value of college majors*. Washington, DC: Georgetown University Center on Education and the Workforce.
- Christman, D., & McClellan, R. (2008). Living on barbed wire: Resilient women administrators in educational leadership programs. *Educational Administration Quarterly*, 44, 3–29. doi:10.1177/0013161X07309744

- Cockrell, K. S., Placier, P. L., Cockrell, D. H., & Middleton, J. N. (1999). Coming to terms with “diversity” and “multiculturalism” in teacher education: Learning about our students, changing our practice. *Teaching and Teacher Education*, 15, 351–366.
- Collins, P. H. (2009). *Black feminist thought. Knowledge, consciousness, and the politics of empowerment*. New York, NY: Routledge.
- Cortina, R., & San Roman, S. (Eds.). (2006). *Women and teaching: Global perspectives on the feminization of a profession*. New York, NY: Palgrave Macmillan.
- Crenshaw, K. W. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989, 139–167.
- Crenshaw, K. W. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43, 1241–1299. doi:10.2307/1229039
- DeCorse, C. J. B., & Vogtle, S. P. (1997). In a complex voice: The contradictions of male elementary teachers’ career choice and professional identity. *Journal of Teacher Education*, 48(1), 37–46.
- deMarrais, K. B., & LeCompte, M. D. (1998). *The way schools work: A sociological analysis of education* (2nd ed.). White Plains, NY: Longman Publishers.
- Dingus, J. (2008). “Our family business was education”: Professional socialization among intergenerational African-American teaching families. *International Journal of Qualitative Studies in Education*, 21, 605–626. doi:10.1080/09518390701470313
- Dixson, A. D., & Dingus, J. E. (2007). In search of our mothers’ gardens: Black women teachers and professional socialization. *Teachers College Record*, 110, 805–837.
- Douglas, S. J. (2010). *Enlightened sexism: The seductive message that feminism’s work is done* (1st ed.). New York, NY: Times Books.
- Drudy, S. (2008). Gender balance/gender bias: The teaching profession and the impact of feminisation. *Gender and Education*, 20, 309–323. doi:10.1080/09540250802190156
- Dworkin, A. G. (1987). *Teacher burnout in the public schools: Structural causes and consequences for children*. Albany, NY: State University of New York Press.
- Eng, D. L. (2001). *Racial castration: Managing masculinity in Asian America*. Durham, NC: Duke University Press.
- England, P., Budig, M., & Folbre, N. (2002). Wages of virtue: The relative pay of care work. *Social Problems*, 49, 455–473. doi:10.1525/sp.2002.49.4.455
- Etzioni, A. (1969). *The semi-professions and their organization: Teachers, nurses, social workers*. New York, NY: Free Press.
- Foster, M. (1998). *Black teachers on teaching*. New York: The New Press.
- Fultz, M. (1995). African-American teachers in the south, 1890–1940: Growth, feminization, and salary discrimination. *Teachers College Record*, 96, 544–568.
- Galman, S. (2006). Rich white girls: Developing critical identities in teacher education and novice teaching settings. *International Journal of Learning*, 13, 3–13.
- Galman, S. (2012). *Wise and foolish virgins: White women at work in the feminized world of primary school teaching*. Lanham, MD: Lexington Books.
- Galman, S., Pica-Smith, C., & Rosenberger, C. (2010). Aggressive and tender navigations: Teacher educators confront whiteness in their practice. *Journal of Teacher Education*, 61, 225–236. doi:10.1177/0022487109359776
- Garmon, M. A. (2004). Changing preservice teachers’ attitudes/beliefs about diversity. *Journal of Teacher Education*, 55, 201–213. doi:10.1177/0022487104263080
- Gay, G., & Howard, T. (2000). Multicultural teacher education in the 21st century. *The Teacher Educator*, 36, 1–16. doi:10.1080/08878730009555246

- Gitlin, A. (1996). Gender and professionalization: An institutional analysis of teacher education and unionism at the turn of the twentieth century. *Teachers College Record*, 97, 588–624.
- Gomez, M. L., Rodriguez, T., & Agosto, V. (2008). Who are Latino prospective teachers and what do they bring to US schools? *Race Ethnicity and Education*, 11, 267–283. doi:10.1080/13613320802291165
- Grant, C. A., & Gillette, M. (1987). The Holmes Report and minorities in education. *Social Education*, 51, 517–521.
- Guarino, C. M., Santibanez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76, 173–208. doi:10.3102/00346543076002173
- Guyton, E., Saxton, R., & Wesche, M. (1996). Experiences of diverse students in teacher education. *Teaching and Teacher Education*, 12, 643–652. doi:10.1016/S0742-051X(96)00008-X
- Hall, E. J., & Rodriguez, M. S. (2003). The myth of postfeminism. *Gender and Society*, 17, 878–902.
- Harper, S., & Reskin, B. (2005). Affirmative action at school and on the job. *Annual Review of Sociology*, 31, 357–379. doi:10.1146/annurev.soc.31.041304.122155
- Hausmann, R., Tyson, L. D., & Zahidi, S. (2010). *The global gender gap report 2010*. Geneva, Switzerland: World Economic Forum.
- Hayes, M. T., & Kelly, M. (2000). Transgressed boundaries: Reflections on the problematics of culture and power in developing a collaborative relationship with teachers at an elementary school. *Curriculum Inquiry*, 30, 451–472. doi:10.1111/0362-6784.00174
- Hill, C., Corbett, C., & St. Rose, A. (2010). *Why so few? Women in science, technology, engineering and mathematics*. Washington, DC: AAUW.
- Hoff-Sommers, C. (2000). *The war against boys: How misguided feminism is harming our young men*. New York, NY: Simon & Schuster.
- hooks, b. (1989). *Talking back: Thinking feminism, thinking Black*. Boston, MA: West End Press.
- Hopmann, S. T. (2008). No child, no school, no state left behind: Schooling in the age of accountability. *Journal of Curriculum Studies*, 40, 417–456. doi:10.1080/00220270801989818
- Ingersoll, R., & Merrill, L. (2010). Who's teaching our children? *Educational Leadership*, 67(8), 14–20.
- Institute for Women's Policy Research. (2010). *The gender wage gap: 2009*. Washington, DC: Author. Retrieved from <http://www.iwpr.org/publications/pubs/the-gender-wage-gap-2009>
- James, J. H. (2010). Teachers as mothers in the elementary classroom: Negotiating the needs of self and other. *Gender and Education*, 22, 522–534. doi:10.1080/09540250903519436
- Jennings, T. (2007). Addressing diversity in US teacher preparation programs: A survey of elementary and secondary programs' priorities and challenges from across the United States of America. *Teaching & Teacher Education*, 23, 1258–1271. doi:10.1016/j.tate.2006.05.004
- Johnson, A. S. (2007). An ethics of access: Using life history to trace preservice teachers' initial viewpoints on teaching for equity. *Journal of Teacher Education*, 58, 299–314.
- Judge, H. (1995). The images of teachers. *Oxford Review of Education*, 21, 253–265. doi:10.1080/0305498950210301

- Kohli, R. (2009). Critical race reflections: Valuing the experiences of teachers of color in teacher education. *Race Ethnicity and Education, 12*, 235–251. doi:10.1080/13613320902995491
- Labaree, M. D. F. (2006). *The trouble with ed schools* (1st ed.). New Haven, CT: Yale University Press.
- Ladson-Billings, G. (2009). “Who you callin' nappy-headed?” A critical race theory look at the construction of Black women. *Race Ethnicity and Education, 12*, 87–99. doi:10.1080/13613320802651012
- Lamont, M. (2000a). *The dignity of working men: Morality and the boundaries of race, class, and immigration*. Cambridge, MA: Harvard University Press.
- Lamont, M. (2000b). The rhetoric of racism and anti-racism in France and the United States. In M. Lamont & L. Thevenot (Eds.), *Rethinking comparative cultural sociology: Repertoires of evaluation in France and the United States* (pp. 25–55). London, UK: Cambridge University Press.
- Landeros, M. (2011). Defining the “good mother” and the “professional teacher”: Parent-teacher relationships in an affluent school district. *Gender and Education, 23*, 247–262. doi:10.1080/09540253.2010.491789
- Lightfoot, S. L. (1978). *Worlds apart: Relationships between families and schools*. New York, NY: Basic Books.
- Lightfoot, S. L. (1983). Lives of teachers. In L. Shulman & G. Sykes (Eds.), *Handbook of teaching and policy* (pp. 241–260). New York, NY: Longman.
- Liston, D. P. (1995). Work in teacher education: A current assessment of U.S. teacher education. In N. Shimahara & I. Holowinsky (Eds.), *Teacher education in industrialized nations* (pp. 87–124). New York, NY: Garland.
- Loers, D. (2007). Why anyone younger than 40 (or who isn't a feminist) should read this book. *Psychology of Women Quarterly, 31*, 120–121. doi:10.1111/j.1471-6402.2007.00336_8.x
- Lopez-Claros, A., & Zahidi, S. (2005). *Women's empowerment: Measuring the global gender gap*. Geneva, Switzerland: World Economic Forum.
- Lorde, A. (1984). *Sister outsider: Essays and speeches*. Trumansburg, NY: Crossing Press.
- Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.
- Lundberg, M. A. (1997). You guys are overreacting: Teaching prospective teachers about subtle gender bias. *Journal of Teacher Education, 48*, 55–61. doi:10.1177/0022487197048001008
- Mansbridge, J., & Flaster, K. (2007). The cultural politics of everyday discourse: The case of “male chauvinist.” *Critical Sociology, 33*, 627–660. doi:10.1163/156916307X210973
- Marston, S. H. (2010). Why do they teach? A comparison of elementary, high school and college teachers. *Education, 131*, 437–454.
- Martino, W. J. (2008). Male teachers as role models: Addressing issues of masculinity, pedagogy and the re-masculinization of schooling. *Curriculum Inquiry, 38*, 189–223. doi:10.1111/j.1467-873X.2007.00405.x
- McCarthy, C. (2003). Contradictions of power and identity: Whiteness studies and the call of teacher education. *International Journal of Qualitative Studies in Education, 16*(1), 127–133.
- McCray, A. D., Sindelar, P. T., Kilgore, K. K., & Neal, L. I. (2002). African-American women's decisions to become teachers: Sociocultural perspectives. *International journal of Qualitative Studies in Education, 15*, 269–290.

- McIntyre, A., Chatzopoulos, N., Politi, A., & Roz, J. (2007). Participatory action research: Collective reflections on gender, culture, and language. *Teaching and Teacher Education, 23*, 748–756. doi:10.1016/j.tate.2006.12.025
- Meade, B., & Gershberg, A. I. (2008). Making education reform work for the poor: Accountability and decentralization in Latin America. *Journal of Education Policy, 23*, 299–322. doi:10.1080/02680930801923823
- Miller, J. H. (1997). Gender issues embedded in the experience of student teaching: Being treated like a sex object. *Journal of Teacher Education, 48*, 19–28. doi:10.1177/0022487197048001004
- Montecinos, C., & Nielsen, L. E. (1997). Gender and cohort differences in university students' decisions to become elementary teacher education majors. *Journal of Teacher Education, 48*, 47–55. doi:10.1177/0022487197048001007
- Mullen, C. (2001). Disabilities awareness and the pre-service teacher: A blueprint of a mentoring intervention. *Journal of Education for Teaching, 27*, 39–61. doi:10.1080/02607470120042537
- Nail, P. R., & McGregor, I. (2009). Conservative shifts among liberals and conservatives following 9/11/01. *Social Justice Research, 22*, 231–240. doi:10.1007/s11211-009-0098-z
- National Council on Teacher Quality. (2010). *Teacher layoffs: Rethinking last hired, first fired policies*. Washington, DC: Author.
- National Research Council. (2010). *Preparing teachers: Building evidence for sound policy*. Washington, DC: National Academies Press.
- Noddings, N. (1990). Feminist critiques in the professions. *Review of Research in Education, 16*, 393–424. doi:10.2307/1167357
- Okopny, C. (2008). Why Jimmy isn't failing: The myth of the boy crisis. *Feminist Teacher, 18*, 216–228.
- Peshkin, A. (1988). In search of subjectivity—one's own. *Educational Researcher, 17*, 17–21. doi:10.3102/0013189X017007017
- Phillips, D. K. (2002). Female pre-service teachers' talk: Illustrations of subjectivity, visions of "nomadic" space. *Teachers and Teaching: Theory and Practice, 8* (1), 9–27.
- Planty, M., Hussar, W., Snyder, T., Kena, G., KewalRamani, A., Kemp, J., . . . Dinkes, R. (2009). *Condition of education 2009* (NCES 2009–081). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Pollock, M., Deckman, S., Mira, M., & Shalaby, C. (2009). "But what can I do?": Three necessary tensions in teaching teachers about race. *Journal of Teacher Education, 61*, 211–224. doi:10.1177/0022487109354089
- Quartz, K. H., Thomas, A., Anderson, L., Masyn, K., Lyons, K. B., & Olsen, B. (2008). Careers in motion: A longitudinal retention study of role changing among early career urban educators. *Teachers College Record, 110*, 218–250.
- Raible, J., & Irizarry, J. G. (2007). Transracialized selves and the emergence of post-white teacher identities. *Race Ethnicity and Education, 10*, 177–198.
- Raider-Roth, M., Albert, M., Bircann-Barkey, I., Gidseg, E., & Murray, T. (2008). Teaching boys: A relational puzzle. *Teachers College Record, 110*, 443–481.
- Reynolds, E. (2001). Learning the 'hard' way: Boys, hegemonic masculinity and the negotiation of learner identities in the primary school. *British Journal of Sociology of Education, 22*, 369–385.
- Ringrose, J. (2007). Successful girls? Complicating post-feminist, neoliberal discourses of educational achievement and gender equality. *Gender and Education, 19*, 471–489. doi:10.1080/09540250701442666

- Sabbe, E., & Aelterman, A. (2007). Gender in teaching: A literature review. *Teachers and Teaching, 13*, 521–538. doi:10.1080/13540600701561729
- Saffold, F., & Longwell-Grice, H. (2008). White women preparing to teach in urban schools: Looking for similarity and finding difference. *Urban Review, 40*, 186–209. doi:10.1007/s11256-007-0069-3
- Schutz, A. (2004). Rethinking domination and resistance: Challenging postmodernism. *Educational Researcher, 33*, 15–23. doi:10.3102/0013189X033001015
- Sherman, W. (2005). Preserving the status quo or renegotiating leadership: Women's experiences with a district-based aspiring leaders program. *Educational Administration Quarterly, 41*, 707–740. doi:10.1177/0013161X05279548
- Siltanen, J., & Doucet, A. (2008). *Gender relations: Intersectionality and beyond*. Oxford, UK: Oxford University Press.
- Simpson, R. L., & Simpson, I. H. (1969). Women and bureaucracy in the semi-professions. In A. Etzioni (Ed.), *The semi-professions and their organization: Teachers, nurses and social workers* (pp. 196–197). New York, NY: Free Press.
- Singh, K., Allen, K. R., Scheckler, R., & Darlington, L. (2007). Women in computer-related majors: A critical synthesis of research and theory from 1994 to 2005. *Review of Educational Research, 77*, 500–533. doi:10.3102/0034654307309919
- Smulyan, L. (2004a). Choosing to teach: Reflections on gender and social change. *Teachers College Record, 106*, 513–543. doi:10.1111/j.1467-9620.2004.00349.x
- Smulyan, L. (2004b). Redefining self and success: Becoming teachers and doctors. *Gender and Education, 16*, 225–245. doi:10.1080/09540250310001690591
- Thomas, E., Wingert, P., Conant, E., & Register, S. (2010). Why we can't get rid of failing teachers. *Newsweek, 155*(11), 24–27.
- Titus, J. J. (2000). Engaging student resistance to feminism: "How is this stuff going to make us better teachers?" *Gender and Education, 12*, 21–37. doi:10.1080/09540250020382
- Vavrus, M. (2009). Sexuality, schooling, and teacher identity formation: A critical pedagogy for teacher education. *Teaching and Teacher Education, 25*, 383–390. doi:10.1016/j.tate.2008.09.002
- Weaver-Hightower, M. (2003). The "boy turn" in research on gender and education. *Review of Educational Research, 73*, 471–498.
- Weber, S., & Mitchell, C. (1995). *That's funny, you don't look like a teacher! Interrogating images and identity in popular culture*. London, UK: Falmer.
- White, K. (2009). Using preservice teacher emotion to encourage critical engagement with diversity. *Studying Teacher Education, 5*, 5–20. doi:10.1080/17425960902830369
- Wu, B. (2011). *Whose culture has capital? Class, culture, migration and mothering*. Bern, Switzerland: Peter Lang.
- Young, E. (2010). Challenges to conceptualizing and actualizing culturally relevant pedagogy: How viable is the theory in classroom practice? *Journal of Teacher Education, 61*, 248–260. doi:10.1177/0022487109359775
- Young, M. D. (2005). Shifting away from women's issues in educational leadership in the US: Evidence of a backlash? *International Studies in Educational Administration, 33*, 31–42.
- Zumwalt, K., & Craig, E. (2005). Teachers' characteristics: Research on the demographic profile. In M. Cochran-Smith & K. M. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 111–156). Mahwah, NJ: Lawrence Erlbaum.

Authors

SALLY CAMPBELL GALMAN is an associate professor in the Department of Teacher Education and Curriculum Studies at the University of Massachusetts at Amherst.

CHRISTINE A. MALLOZZI is an assistant professor in the Department of Curriculum and Instruction at the University of Kentucky.