Suggestions for Evaluation Guidelines for Schools Contemplating or Using Single-Sex Education

By Sue Klein, Ed.D, Education Equity Director, Feminist Majority Foundation (FMF)¹

At the individual school level what evaluations should the U.S. Department of Education (ED) require to justify the initiation and continuation of U.S. public K-12 single-sex education?

INTRODUCTION

Can separate ever be equitable and if so when? This question must be addressed repeatedly as proposals come forward calling for segregation for education on the basis of race, sex, social economic status (SES), etc. The federal government has important responsibilities to enforce civil rights laws to ensure equitable treatment and to provide guidance on the best evidence-based practices to improve education, especially for recipients of federal financial assistance.

FMF is requesting that ED and other federal agencies issue rigorous evaluation guidance to decrease sex discrimination. This guidance is critically important in stopping the increased sex discriminatory sex segregation that has accompanied the Bush Administration 2006 ED Title IX regulation which weakened prohibitions against single-sex education. The Feminist Majority Foundation (FMF), the National Coalition for Women and Girls in Education (NCWGE), and others have been recommending the rescission of these 2006 regulations and federal guidance to stop this deliberate sex discrimination since they were issued. This rescission would mean that all education institutions covered under Title IX would be required to use the stronger prohibitions against sex discriminatory single-sex education in the pre-2006 Title IX regulations from ED and other federal agencies instead of the weaker safeguards in the 2006 ED only changes. However, it should be noted that the pre-2006 Title IX regulations allow sex separation for remedial or affirmative purposes to decrease sex discrimination in desired outcomes. Thus, the rigorous evaluation guidance from ED and other agencies requested in

¹ These ideas are contributed by Sue Klein, FMF, based in large part on the FMF Report on the *State of Public School Sex Segregation in the United States 2007-10* issued in June 2012 and on her previous evaluation work in the U.S. Department of Education. The suggestions have been refined by comments on earlier drafts from evaluation and gender equality experts: Patricia Campbell, Campbell-Kibler Associates; Connie Cordovilla, American Federation of Teachers; Jan Erickson, National Organization for Women; Lynn Fox, Emeritus Dean, School of Education, American University; Amy Katz, ACLU Women's Rights Project; Sally Martinez, Feminist Majority Foundation; Galen Sherwin, ACLU Women's Rights Project; and Eleanor Smeal, President, Feminist Majority Foundation; but the author takes full responsibility for the final version.

² All the Title IX Regulations allow some exceptions for single-sex education such as after school activities of Girl and Boy Scouts, contact sports and sexuality education. The suggested federal evaluation guidance in this paper is not required for these easy to define Title IX exceptions. However, it should be noted that some states have

this paper is critically needed to stop sex discriminatory sex segregation now and it will continue to be needed even after the rescission of the ED 2006 Title IX regulation.

Rigorous and continual evaluations are essential in guiding decisions about deliberate single-sex³ education in schools covered by Title IX - which prohibits discrimination based on sex in education programs and activities in institutions receiving federal financial assistance. These evaluation-based decisions are critical since there were over 1000 K-12 public U.S. schools with single-sex academic classes during 2007-10⁴. The FMF⁵ and the American Civil Liberties Union (ACLU)⁶ found numerous schools where this intentional single-sex education increased sex discrimination and sex stereotyping. Thus, these sex separation (and exclusion) strategies often violate Title IX and the Equal Protection Clause of the Fourteenth Amendment to the U.S. Constitution as well as other federal and state anti-discrimination laws. Although there have been vocal proponents of single-sex education as a "solution", FMF has not seen rigorous evidence that single-sex education helps especially vulnerable or any other types of students better than coeducation.

Despite the current lack of evidence, it is possible that some specific types of single-sex education may have beneficial effects, perhaps when used as remedial/affirmative strategies to decrease gender gaps in outcomes. Thus, rigorous, well detailed comprehensive and publicly accessible evaluations should help us learn if any purposeful single-sex education is beneficial. For example, rigorous process and outcome evaluations of an exploratory all-female physics class compared to three coed physics classes in the Illinois Mathematics and Science Academy provided insights about the relationship of nature of instruction in these classes and outcome indicators such as test scores or motivation to study more physics.⁷

constitutions or laws that are more stringent in restricting sex segregation than Title IX. For example, in Pennsylvania there are no special non-discrimination exceptions for single-sex contact sports.

³ Single-sex, sex-separated education, and sex-segregated education will be used interchangeably.

⁴ Klein, S. (2012). *State of Public School Sex Segregation in the U.S. Part I, Part II, and Part III.* Feminist Majority Foundation. http://feminist.org/education/SexSegregation.asp

⁵ Ibid.

⁶ ACLU, Women's Rights Project (2012) "Teach Kids, Not Stereotypes" Campaign. http://www.aclu.org/files/assets/doe_ocr_report2_0.pdf

⁷ Dagenais, R., Moyer, E., Musial, D, Sloan, M, Torp, L., & Workman, D. (1994). *Calculus-Based Physics Exploratory Study Summary Report*, Illinois Mathematics and Science Academy.

The U.S. Department of Education (ED) 2006 Title IX Regulation requires biannual evaluations but guidance on these evaluations has been inadequate and the few "required" evaluations located to date have not provided rigorous evidence to justify initiation and continuation of single-sex education. Also the ED is continually requiring more rigorous evidence of effectiveness in its funded activities even in areas of curriculum⁸ where federal responsibilities for setting standards must be shared with the states. In contrast, the federal government has designated responsibilities for setting standards to enforce the federal civil rights laws. Thus, the evaluation standards for decisions on single-sex education should be at least as rigorous as other federal evaluation requirements. The use of rigorous evidence of what works is especially important in education programs and activities that are likely to limit civil rights and increase costs. These are certainly concerns with purposeful single-sex education.

As noted earlier, this evaluation guidance should be used to assist in compliance with the pre-2006 ED Title IX regulations used by all federal agencies except ED as well as to provide guidance on the existing 2006-ED Title IX regulation before it is rescinded. Thus, it would be ideal if this guidance is issued jointly by ED and the U.S. Department of Justice (DOJ).⁹

The evaluation requirements and the related recommendations on their implementation have multiple purposes and audiences. For example they would:

Clarify federal interpretations of how Title IX and related federal protections against discrimination apply to single-sex education. The evaluation requirements should provide standards and procedures for assessing sex discrimination and stereotyping to determine if purposeful single-sex education is in compliance with civil rights laws. The Office of Federal Contract Compliance (OFCCP) provided similar guidance in their 2-28-13 rescission of two guidance documents interpreting the nondiscrimination in employment requirements of Executive Order 11246.¹⁰

⁸ See Dec. 2012 ED request for revision of EDGAR. http://www.regulations.gov/#!documentDetail;D=ED-2012-OII-0026-0001. States share responsibility for establishing curriculum standards in subject areas (such as reading and mathematics) and are key partners in establishing core curriculum standards, but federal civil rights laws set minimum standards of equal protection for all states. States have added additional civil rights protections including state equal rights amendments and Title IX type state laws.

⁹ DOJ among other responsibilities helps coordinate interpretations of Title IX among the federal agencies and has prepared a joint amicus brief and user guidance with ED related to sexual assault and school integration.

¹⁰The OFCCP's 2-28-2013 rescission of guidance documents for Executive Order 11246 on how to determine compliance with nondiscrimination employment laws said, "OFCCP is disclosing its interpretation of specific legal and technical issues to assist contractors in evaluating their own practices and promoting greater voluntary

- Help ED and DOJ issue improved guidance (following the OFCCP's example) and
 rescind the complicated and misleading ED 2006 Title IX regulation. This FMF version
 of the evaluation requirements maintains helpful principles from the ED 2006 Title IX
 regulation such as forbidding over generalized stereotypes to be used as justification for
 single-sex education. It also specifies easy to understand requirements as reflected in
 recent judicial decisions such as the need to opt-in to specific single-sex classes to
 demonstrate voluntary choice.
- Help decision-makers and other stakeholders attend to the full range of evaluation requirements as they propose or implement single-sex education. Many proponents of single-sex education and decision-makers need to be aware of their responsibilities to make sure that any single-sex education must be well justified and that it will not increase sex discrimination and sex stereotyping in violation of Title IX and other civil rights laws. They should also address the costs involved in implementing single-sex education.
- Help Title IX coordinators and evaluators of single-sex education better understand
 the criteria and standards needed as they prepare reports and guide decisions on the
 justification, implementation, and results of specific single-sex education interventions.
- Help researchers interested in increasing knowledge of the nature and effectiveness of single-sex and coeducation obtain evaluation results for allowable single-sex classes, activities and schools. This will be facilitated by requirements for transparency and posting of evaluations on public access websites of all schools with single-sex education and by rigor in evaluation methodology.

OVERVIEW OF THE EVALUATION REQUIREMENTS AND STRATEGIES FOR IMPLEMENTING THEM

Rigorous evaluations should be required in three types of phased decisions about deliberate single-sex education:

Phase I: Are the initial justification, specific implementation plan, and evaluation plan for single-sex education adequate?

- Is the initial written justification for each single-sex class, activity, or school, based on research and evaluation evidence that the sex separation is needed to accomplish specific goals to decrease sex discriminatory outcomes¹¹ (or attain other education achievement goals) in the designated school/class better than comparable coeducation?
- Does the school's plan for specific sex separation comply with safeguards to prevent sex discrimination and related requirements such as completely voluntary participation and comparable coed options?
- Is there an adequate evaluation plan that will provide written verifiable results for Phase II and Phase III decisions as specified in the rest of this document?

Phase II. Does the evaluation of the processes¹² to implement single-sex education indicate full compliance with the laws and guidance in the Title IX regulations? Is there any evidence that what is being done increases, rather than decreases, sex discrimination and sex stereotyping? Do the evaluation results document full implementation of the plans approved in Phase I?

This continual process/compliance or accountability formative evaluation involves assessing equality of what is occurring between the classes/schools for girls and for boys as well as between the single-sex and coed classes and schools. It also involves compliance with requirements for voluntary participation and adequate evaluations. To ascertain full compliance with Title IX and other equal protection laws, both single-sex and coed activities should be examined to ensure that they are non-sexist and don't increase sex stereotyping.

¹¹ Decreasing sex discriminatory outcomes means that the single- sex education strategy was used for remedial or affirmative purposes, an exception allowed in the 1975 Title IX regulation that is still used by all federal agencies except ED. Indicators of success may include reduced gender gaps or increased numbers of male and female students in "non traditional" career programs. This is a more stringent and more appropriate Title IX standard than the broader standard in the ED 2006 Title IX regulation of fulfilling governmental objectives.

¹² Multiple related terms are used here to describe ongoing evaluation efforts to maintain compliance with Title IX and other civil rights laws and to learn about how the single-sex education is implemented. Evaluators define formative or process evaluation as how the program is conducted related to how it was planned or related to other criteria such as compliance with non-discrimination laws. The accountability criteria may focus on costs and other achieved results. This ongoing rigorous evaluation may be conducted by internal or external evaluators and the results are usually documented and summarized at specific intervals. (See Michael Scriven, 1991. *Evaluation Thesaurus*.) OCR can choose the terms they prefer. OCR noted related evaluation compliance monitoring responsibilities in Title IX guidance on athletics in 2010 and sexual harassment and violence in 2011.

This process evaluation also provides important information on the implementation of the planned single-sex education and the coed comparisons to increase understanding of the evaluation outcomes.

Phase III: Does the single-sex education have the intended effect on decreasing sex discriminatory outcomes¹³ better than comparably well- resourced non-sexist coeducation¹⁴?

This Phase III outcome or impact evaluation should examine multiple indicators to learn if the sex separation meets the originally identified and justified needs for single-sex education.¹⁵ It should also determine if the single-sex education has a positive or negative impact on other unintended outcomes for boys and girls. As in all rigorous impact or outcome evaluations the effects should be clearly attributable to the well-defined interventions.

Strategies for Implementing the Evaluation Requirements

It is important, but challenging, to provide adequate written evaluations to guide these three types of decisions. Because single-sex education entails teaching girls and boys in separate classes/schools/activities, even where there are paired boy or girl classes, activities, or schools, it is difficult to make the experiences and benefits of the all-girls class and the all-boys class substantially equal. If not equal, they are sex discriminatory which is prohibited by Title IX with

¹³ See explanation of remedial or affirmative strategies to decrease sex discriminatory outcomes in note 10 and information on outcome evaluation in note 14.

When describing coeducation comparisons in these evaluation guidelines, FMF assumes that the coeducation is at least non-sexist and would like it to include proactive gender equity strategies at the more positive end of the continuum. For example, at the non-sexist end of the continuum, the teachers in the coed classes do not put boys in the front and girls in back of the room and they do not teach sex stereotypes. FMF also hopes that all teachers try to avoid unconscious sex bias and discrimination. To understand the evaluation results sex discriminatory activities and deliberate proactive gender equity interventions at the positive end of the continuum should be documented when comparing coed and single-sex classes. This documentation should be part of the Phase II process evaluation. Many proactive gender equity strategies are described in the 2007 Klein, et al. Eds. *Handbook for Achieving Gender Equity through Education*, http://www.feminist.org/education/handbook.asp. Nancy Chi Cantalupo calls these proactive gender equity strategies "Reformed Coeducation" in her 2012 San Diego Law Review article *Comparing Single-Sex and Reformed Coeducation: A Constitutional Analysis, 2012*. Vol. 49, p. 725-89. The American Council for Coeducational Schooling established by social science researchers has been documenting the value of nonsexist, gender-fair, or the more proactive "reformed coeducation" over single-sex education. (See www.coedschooling.org)

¹⁵ To facilitate decisions about its continuation and to inform others about its merit, outcome or impact evaluations should look at the effects related to anything that is relevant including comparisons. The multiple indicators may include student achievement test scores, attendance, career plans, good behavior, etc., but should not include parent, student, and teacher indicators of how well they like their single-sex or coed education.

a few exceptions. It is also difficult to ensure that the single-sex classes and the coed classes are comparable as required by the Title IX regulations.

Fortunately for equity advocates and evaluators/researchers, the standards for equal protection laws and for many types of good comparative research and evaluation mesh well. Like the legal requirements for equality, good research is dependent on clearly defined equitable comparisons to learn if a program is properly implemented and to learn what works best.

After describing the evaluation requirements for these three decision phases in more detail, strategies for implementing these rigorous evaluations using Title IX coordinators and others will be discussed.

The (well-trained) Title IX coordinators at the school, district, and state levels should be involved in the implementation and review decisions along with other education decision makers such as school boards. All information on the plans, the evaluations, and the review decisions should be easily publicly accessible for free, and updated regularly on public websites maintained at each entity.

EVALUATION REQUIREMENTS

These three phase evaluation requirements outline practical ways to examine evidence, facilitate decisions, and increase knowledge about when single-sex education should be allowed under U.S. equality laws such as Title IX and the Fourteenth Amendment to the U.S. Constitution. They will help ensure that decisions to start and end sex segregation in public education are based on sound and convincing evidence.

Phase I: Provide Initial Conceptual Justifications and Detailed Implementation and Evaluation Plans for Single-sex Education

In Phase I, the Title IX coordinators and school board decision-makers need to review two types of justifications before deciding on initial or continued approval of the single-sex education in each school. The first (I-A) is a research-based conceptual or genuine justification that the single-sex education is needed and that the proposed implementation is likely to succeed better than comparable coeducation in the specific school where it is proposed. The second (I-B) is a detailed plan for implementing the single-sex education so that it complies with all civil rights requirements and safeguards including an adequate evaluation plan which meets all other evaluation requirements in this document. Starting in the 2013-4 academic year, this

initial evaluation requirement should also apply to approvals of ongoing single-sex education for all recipients of federal financial assistance.

❖ I-A: Requirements for the conceptual justification for initial or continued approval of single-sex education.

This justification must be based on cumulative high quality rigorous scientific evidence that sex separation is needed and has been effective in decreasing sex discrimination in outcomes (or in attaining governmental objectives) when compared to non-sexist coeducation. More specifically, the initial conceptual justification for the single-sex education address the following questions:

• I-A-1: What is the evidence that the boys and girls in the specified class, activity, or school have different needs that are best addressed in a single-sex environment? This justification must be provided for each class or activity in a coed school and it must be based on school specific data which show sex differences in critical indicators such as girls substantially outperforming boys in mathematics. Each single-sex class (e.g. 7th grade math) at each grade level must be justified. This very specific class and grade level justification is congruent with the DOJ & ED 2010 brief to support ACLU Vermilion Parish Appeal.

In some cases, where there is a well documented need for remedial or affirmative action to create more gender equitable outcomes, the justification of the potential need for sex separation may be strengthened by documenting unsuccessful efforts to use sexneutral solutions in coeducational settings. However, there should still be some research that indicates that proposed sex-segregation strategy is likely to meet the need better than comparable coeducation.

Likeability and preferences for single-sex instruction are no more acceptable than preferences for classes to be segregated by race or the idea that something should be tried because it is new or unique. (Also see language under I-A-2.)

■ I-A-2: What is the specific gender equity problem that will be ameliorated by the proposed sex-segregation strategy? What is the cumulative high quality rigorous research-based justification¹⁷ that girls or boys will learn something specific in the sex-

¹⁷ The Elementary and Secondary Education Act, 20 U.S.C. § 7801 (37), lists many components of "scientifically based research." The website of the American Council for Co-Educational Schooling www.coedschools.org and the

¹⁶ Pilot and experimental single-sex programs must adequately address the same rigorous requirements as all other programs.

segregated environment better than in a non-sexist coeducational environment? (For example, will girls or boys learn parenting skills better in a sex-segregated environment than a coeducational environment even if most girls have been socialized to practice these skills more than most boys?)

In reviewing the adequacy of the required "genuine justifications" for specific single-sex education, the Title IX coordinators and other decision makers must ensure that:

- The approved justifications are not based on pseudoscience or "overly broad generalizations about the different talents, capacities, or preferences of either sex". Advocates of single-sex education have used these inappropriate justifications as discussed by Halpern et. al. (2011)¹⁸, Title IX at Forty (NCWGE 2012)¹⁹, ACLU (2012) and FMF (2012). These invalid assumptions based on misconceptions about sex- based brain differences, learning styles, etc. do not qualify as adequate genuine conceptual justifications for single-sex education.
- Approved justifications for the single-sex education must be based on rigorous defensible evaluations or related research. Chapter 7 "The Risks of Sex-Segregated Public Education for Girls, Boys, and Everyone" Klein (2011)²⁰, discusses common methodological flaws in research on single-sex education. They include:
 - Drawing conclusions from an individual study, instead of reviews of multiple similar single-sex interventions selected because they were unbiased, rigorous, systematic collections of data on how the treatments compare and on the relationship of the treatment to the results. (These reviews should describe the mixed positive and negative outcomes based on a variety of indicators, contexts, and comparisons.)
 - Selection bias. Often the more motivated students or parents volunteer for the new single-sex class or school or the special education students are disqualified from the single-sex classes.

Sex Segregation page of the FMF website www.feminist.org/education/SexSegregation.asp contain discussions of research and legal standards to judge the adequacy of research based justifications for single-sex education options.

¹⁸ http://feminist.org/education/pdfs/pseudoscienceofsinglesexschooling.pdf

¹⁹ http://feminist.org/education/pdfs/TitleIXat40NCWGE.pdf

²⁰ http://feminist.org/education/pdfs/RisksofSexSegregatedEducation.pdf

- Treatment inequities in the comparison groups. This may include providing more teacher training, smaller teacher student ratios, and better instruction and resources to the single-sex classes or schools. It may also include heavy doses of sex stereotyping in the single-sex groups. (The process evaluations in Phase II should help identify these inequities.)
- o Bias or weakness in the indicators, data reporting, and analyses. For example, teachers may rate student performance higher when they expect it to be higher because of their expectations for single-sex education. It is difficult to have a single-sex class where evaluators are "blind" to the composition of the class. In other cases weak, subjective, and invalid indicators are used such as parental attitudes about their choices to place their child in a single-sex class.
- Hawthorn, John Henry, and Pygmalion effects due to the newly introduced and often highly praised single-sex treatment or having the participants in the special treatment try harder than usual because they are aware they are doing something different.
- Making claims of effectiveness related to the single-sex treatment when other simultaneous treatments (such as the use of an effective student behavior program) were more responsible for the progress than the singlesex classroom.
- I-A-3: Is there adequate exceedingly persuasive justification that the specifically proposed single-sex education will decrease sex discrimination and stereotyping²¹

 better than comparable coeducation? Is this evidence based on positive results from cumulative high quality evaluations of similar single-sex education in similar or different contexts?

Title IX prohibits discrimination on the basis of sex and its regulations require an exceedingly persuasive justification for any gender-based classifications such as separating girls or boys for instruction. Such separation must be justified based on its comparative advantages to non-sexist coeducation and can not be justified by "traditional, often inaccurate, assumptions about the proper roles of men and women." (See 2006 ED Title IX Regulation and 1996 Supreme Court Virginia Military Institute decision).

The remedial or affirmative justification to decrease sex discrimination in outcomes which is allowed in the pre-2006 Title IX regulation is preferred to the broader justifications of attaining other governmental objectives which may not be related to the purpose of Title IX as described in I-A-4.

- I-A-4: Are there any evidence-based expectations that the proposed sex separation will improve any other desired outcomes for girls and boys without increasing the gender gaps in these or other outcomes?
- I-A-5: Are there any evidence-based expectations that the proposed sex separation will produce helpful or harmful outcomes for girls and/or boys and special populations such as low-income minority youth and lesbian, gay, bisexual and transsexual (LGBT) students?
- ❖ I-B: Requirements for the plan to implement (non-sexist) single-sex and coeducation for girls and boys as well as how it will comply with the legal safeguards and the evaluation requirements.

Most deliberate education interventions require a detailed written proposal with evaluation plans and budgets. Schools proposing purposeful single-sex education should submit a similar plan that also specifically addresses requirements prohibiting sex discrimination. Recipients of federal funds for programs that use categories like sex to exclude participants have a high burden to justify their program and to ensure equality/non discrimination. Thus, they should be held to high standards in both planning and implementation.

The plan will address questions such as the following to show compliance with concerns about the rigor of the evaluation/research methodology.

- How will students be selected to participate in single-sex or coed education?
- How will the school ensure that their separate education will be comparable (in student teacher ratio, type and quality of instruction, etc.)
- How will the educators ensure the elimination of sex discrimination and stereotyping?
 (This list of federal responsibilities may be supplemented by requirements at the state or school district level.)

Describe the school's detailed plan for single-sex education. In doing so, explain what the school will do to:

• I-B-1: Ensure that the parent/student selection of single-sex education will be totally voluntary and based on detailed information on the nature of the sex separation and coed options and evidence of their likely impact. This must be helped by providing the parents (and older students) with justification information from the previously discussed conceptual justification and by having a signed consent form that shows the parent/student "opt- in" agreement. Also explain how LGBT considerations will

be addressed. Explain the process for selecting participants in single-sex if demand exceeds supply or if there is a need to have students with equitable skills in comparison coed classes.

- I-B-2: Explain how the school will ensure equitable/comparably well-resourced non sex- discriminatory classes for boys/girls. What indicators will be used to compare classes or schools for boys with classes or schools for girls to document equality and absence of sex discrimination and sex stereotyping? For example, is the student/teacher ratio the same or are the single-sex or boys classes much smaller than the coed or girls classes? Will intangibles such as reputation, prestige, and novelty be examined for parity? Describe the periodic assessments of multiple indicators that will be used to determine if the school's single-sex options are equitable for girls and boys. ²²
- I-B-4: Explain how the school will ensure equitable/comparably well-resourced single-sex/coed classes that do not increase sex discrimination and stereotyping. Will single-sex education be compared with parallel coeducation to document equality of content, resources, and attention? What indicators will be used and how will they be measured? Describe the periodic assessments of multiple indicators that will be used to determine if the school's single-sex options are equitable when compared with coed options.
- I-B-5: Explain how teachers are selected and trained for the single-sex and coed classes. Are teachers assigned to single-sex classes because of their sex? (All submitters and reviewers should be aware that this would be unlawful.) Teachers in coed and single-sex classes should be evaluated in part on the extent to which they avoid the perpetuation of sex stereotypes and sex discrimination and on the extent to which they have equitable interactions with all their students regardless of their sex, race, level of activity, etc.
- I-B-6: Conduct the detailed (Phase II) process /compliance evaluation and the outcome evaluation plan to:
 - Check on the adherence to equality promises in the continual "process/legal compliance evaluation" or accountability/compliance requirements during year one and year two. This process/compliance formative evaluation should also describe how the reviews will be conducted and how the school will make

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²² This may be in the process evaluation plan.

- decisions on corrections or to end the sex separation if compliance with non discrimination safeguards is inadequate.
- O Determine if the outcome evaluations (Phase III) show that the single-sex education is more effective than coeducation comparisons for both girls and boys and should be continued. Behavioral change indicators such as achievement scores, attendance and class participation are encouraged and weak indicators such as parental, student, and teacher attitudes toward sex separation are discouraged.

Detailed descriptions of both the process and the outcome evaluation plan should be submitted with the initial or continuation proposal requesting approval of singlesex education.

If these criteria are not met, the proposed single-sex efforts should be rejected.

- ❖ I-C: Other criteria to use in making decisions about implementing single-sex education that are important but not required by federal civil rights laws.
 - <u>I-C-1:</u> Do state, municipal and school district laws and policies prohibit the planned or actual single-sex education?
 - <u>I-C-2:</u> Will the sex-segregation strategy and associated responsibilities for justification and evaluation add to administrative and financial costs?

Note a budget of the implementation plan is not required for legal civil rights purposes but the school decision-makers may want this information to aid in their cost/benefit analysis. The cost of the evaluation work focusing on the requirements should be included. If the costs for implementing the single-sex education and related evaluation requirements are higher than for coeducation, will the school or district be able to assume them on a long-term basis with or without external funding?

- Is it likely that legal complaints and challenges will increase the administrative and financial costs?
- Is there any indication that the proposed sex separation will produce other harmful outcomes especially for vulnerable girls and/or boys such as low-income minority youth and LGBT students?

Phase II: Conduct Continual Process/Legal Compliance, Accountability or Formative Evaluations and Document the Results.

These continual process/compliance, accountability, formative evaluations should start as soon as single-sex education begins in the school. Title IX coordinators and others are responsible for ensuring that their schools are free of sex discrimination. Also for good evaluation plans and results it is important to collect data on implementation. Both of these civil rights and quality evaluation requirements merge when making decisions about allowable or unlawful single-sex education.

If there is minor lack of compliance with some of the process requirements, this should be noted and the Title IX coordinator should make sure that these problems are corrected quickly. If there is serious lack of compliance, the single-sex education (or sexist coeducation) should be stopped.

Requirements for detailed implementation and process evaluation plans are outlined in Phase I-B and won't be repeated here. In some cases it may be necessary to collect observational data on the instructional processes to check on compliance with non-sexist teaching. The school district may want to hire process or implementation evaluators to work under the guidance of the Title IX coordinator and the District's evaluation office. It would also be helpful for the Title IX coordinator to outreach to gender equity advocates in local affiliates and/or national groups such as the National Organization for Women (NOW), American Association of University Women (AAUW), American Civil Liberties Union (ACLU), Feminist Majority Foundation (FMF), American Council for Coeducational Schooling (ACCES) and the National Coalition for Women and Girls in Education (NCWGE) on the Phase II implementation process evaluation plan. Experts from these groups should also review the evaluation results and make recommendations for improvement as needed. By outreaching to advocates concerned with advancing gender equality the Title IX coordinator will have help in avoiding sex discrimination.

The results of this continual process/legal compliance evaluation should be documented each semester. After the semester reports are reviewed and approved by the Title IX coordinators and others they should be posted on the public websites with the statements of approval and signatures of the decision-makers.

In its 2010-2011 guidance on Title IX athletics and sexual harassment and assault, OCR described similar continual compliance requirements for schools as well as related responsibilities for well-trained Title IX coordinators. (See especially page 7-8 of the 4-7-11 Dear Colleague letter on Sexual Violence and page 8 of the 4-20-10 Dear Colleague Athletics letter.)

Phase III: Submit Outcome Evaluation Results to Determine if the Single-sex Education Should be Continued because it is more Effective than Comparably Well-resourced Coeducation²³ and because it Does Not Increase Sex Discrimination.

Biannual evaluations are required in the ED 2006 Title IX regulation, but of course, the planning, collection, and analysis of evaluation results must be continual for both process and outcome evaluations. Thus, the existing results should be reviewed annually.

The following requirements will ensure that the important outcome evaluations will be sufficiently rigorous to help determine if the single-sex education merits continuation. To merit a formal review of this Phase III outcome evaluation, a school must have received written approval of its Phase I and Phase II reviews by the Title IX coordinator and other decision-makers. Along with reports each semester on measures of continual legal compliance as described in Phase II, the sex-segregated program must submit an outcome evaluation report every year. If the Title IX coordinator and other decision-makers agree that there is convincing evidence that the single-sex education is more effective than comparably well-resourced coeducation in decreasing sex discriminatory outcomes and achieving other education goals, the program should be allowed to continue while updating the Phase II and Phase III implementation and evaluation plans.

Data collection for this outcome evaluation should start as soon as the Phase I review is approved. If baseline information is needed, it may include data from before the implementation of the initially approved single-sex education operational plan. In many cases, the school should use an experienced external evaluator to implement this plan and also participate in related Phase II collection of compliance or implementation information on both the single-sex education and the coed comparisons.

Assuming that the Phase II process evaluation results indicated compliance with the proposed non-sexist implementation plans, the year 1 and year 2 impact or outcome evaluation data should be collected and analyzed. If year 1 outcome evaluation data reveals no significant advantages for single-sex education, the Title IX coordinator and other decision-makers should recommend cancellation of the single-sex intervention unless there is a high probability that

²³ Phase II- process/legal compliance evaluations should be used to end sex discrimination in single-sex and coed programs. If the sex discrimination in the single-sex education can't be ended quickly, the single-sex education should be stopped.

the year 2 results are likely to indicate more positive outcomes for the single-sex education compared to comparable coeducation.

If the first year outcome evaluation data indicated initial advantages for the single-sex intervention, it is important to learn if the second and subsequent years of replication yield similar success. As discussed in the Phase I list of concerns about adequate rigorous evaluation evidence to justify single-sex education, the novelty of the single-sex education may contribute to successful outcomes especially in the first years. Thus, it is important to learn if the results are consistent each year and with different students.

If the outcome evaluation is being conducted to determine if an ongoing (rather than newly approved) program should be continued, the outcome evaluation plan would need to use all relevant quality data. This data may identify problems in compliance with the requirements for process indicators such as comparable class size and types of students²⁴. These implementation problems should be factored into the analysis of the results.

The evaluation comparisons should be in the same school or same school district (if possible) to maintain similarity of students, curriculum, contexts and policies. This should be fairly easy because the school should be using such girl/boy and single-sex versus coed pairings to maintain legal equality as required by the continual process/legal compliance evaluations.

In review, the annual outcome evaluations should reveal:

- If the sex separation has the intended effect on decreasing sex discriminatory outcomes and other education achievement goals better than comparably well-resourced coeducation? This rigorous evaluation should examine multiple indicators to learn if the sex separation meets the originally identified needs for single-sex education. It should also determine if the single-sex education has a positive or negative impact on other important outcomes for boys and girls.
- The results of a rigorous three-way analysis of the effectiveness of the single-sex education every year using multiple indicators and disaggregated information. If single-sex education is provided for both girls and boys the three-way comparisons should be:

 between all-girl and all-boy classes or schools, 2) between the all-girl and the coed comparison, and 3) between the all-boy and the coed comparison.

²⁴ ACLU and others have found that the students in single-sex and comparison coeducation classes or schools may differ based on past academic achievement, prevalence of special education students, SES, etc.

To increase credibility of obtaining non-biased results, this evaluation of comparative effectiveness of the outcomes should be conducted by a qualified external evaluator based on the evaluation plan that was approved in Phase I-B. This evaluation should meet criteria of acceptability established by the ED What Works Clearinghouse. This means avoiding methodological flaws as described in Phase I-A requirements to meet rigorous research-based justifications for single-sex education. It is difficult to control for differences in parental and student selection even in matched groups. ²⁵ For example, there are legal constraints such as requirements for voluntary participation in single-sex education. This makes randomized assignment to single-sex or coeducational groups challenging. Some evaluators meet this challenge by obtaining advanced parental permissions for random student assignments.

RECOMMENDED STRATEGIES FOR IMPLEMENTING RIGOROUS EVALUATIONS

The following two overlapping strategies to: (1) use Title IX coordinators and (2) develop public accountability/ knowledge dissemination procedures that provide feasible incentives to implement all three phases of the recommended evaluation requirements to ensure that only non-sex discriminatory single-sex K-12 public education is allowed. Some of the recommended strategies focus on legal compliance. Others are broader good practices to increase the availability and utility of the required evaluations. The guidance from ED and DOJ should highlight their leadership tools ranging from legal compliance, to the use of rigorous evaluations, to the generation and dissemination of research-based knowledge on what works and what doesn't work to end sex discrimination and increase gender equality.

1: Responsibilities of Title IX coordinators and other decision-makers

Since there is substantial evidence that sex separation often increases sex discrimination, it is important to assign clear responsibility for evidence-based decisions about the initiation, monitoring, and ending of deliberate single-sex education strategies to specific qualified individuals. The Title IX regulations already charge Title IX coordinators with proper implementation of Title IX and OCR has assigned related responsibilities to Title IX coordinators in recent guidance on athletics and sexual harassment/assault. (See bottom of page 14). However, many Title IX coordinators need encouragement, time, resources, and specific training to carry out this evaluation related technical assistance and decision-making involving single-sex education.

²⁵ Chapter 9, "Gender equity in Coeducational and Single-sex Educational Environments" in *The Handbook for Achieving Gender Equity through Education* (Klein, et. al., 2007) discusses methodological issues in more detail.

All the evaluation requirements described in this paper recognize the important role of Title IX coordinators in implementing non-discriminatory education strategies and in playing an influential role in recommending approval or rejection of single-sex education activities. The Title IX coordinators will need to make sure that the required evaluation plans and reports meet high quality rigorous evaluation standards used by ED and others. In doing so, the Title IX coordinators should be encouraged to work with others with legal, research, and evaluation expertise related to gender equality. For example, this expertise would help in the Phase II legal compliance evaluations as well as in the Phase I and Phase III decisions to approve, continue, or end the single-sex education. Many school districts also require their superintendents and school boards to participate in major instructional decisions of this nature. These districts also have procedures to make sure that decision-makers don't have conflicting interests and that they have access to expert advice from state Title IX coordinators, regional OCR offices and other experts in advancing gender equality.

Specifying the important role of Title IX coordinators in evaluation guidance related to potential sex discriminatory sex segregation has multiple advantages. It will encourage many states and school districts to stop neglecting requirements to appoint and train Title IX coordinators to implement Title IX. If OCR points out the need for Title IX coordinators to have important responsibilities as recommended here and in other Title IX guidance documents, states and local school districts will receive powerful incentives to appoint and support qualified Title IX coordinators. Title IX coordinators should also gain prestige and recognition for their good work if they adhere to these evaluation/accountability requirements.

❖ 2: Public accountability/knowledge dissemination procedures

Adhering to these public accountability and dissemination recommendations will foster good decision making and accumulation of knowledge about what works and doesn't work related to single-sex education. Advocates of gender equality will be able to use multiple methods to stop sex discriminatory public school single-sex education even for those schools that implement sex separation without complying with these evaluation requirements and procedural recommendations. Key leadership responsibilities to develop a knowledge base about sex-separated education can also help facilitate ongoing accountability by requiring easy public access to evaluation information.

2-A: General public accountability strategies.

Public accountability and transparency will serve as a check on the adequacy and validity of the information provided to meet the previously described evaluation requirements. As previously noted, all evaluation information requested in the evaluation requirements should be fully documented on the K-12 school, school district,

and state education agency websites. This documentation should include the detailed plans, the evaluation results and the decisions about allowing or ending the sex segregation. The decisions of the Title IX coordinators and other decision-makers such as school boards should be described and justified. This website information should also include any appeals or additional reviews. By submitting the full documentation to the district and state Title IX coordinators and their websites it should also be more feasible for these individuals to keep track of what is happening related to single-sex education in schools under their jurisdiction. The FMF report on single-sex education in the states found that few state Title IX coordinators had any knowledge of this compliance problem.

ED should also provide technical assistance to educators and evaluators who are trying to comply with the evaluation requirements. Additionally, ED should provide recognition and incentives for schools or school districts or states with exemplary accountability/evaluation information on single-sex education on their web pages. The good models of evaluation reports and related information would be selected on the quality and comprehensiveness of their evaluation work and reporting and not on whether their evidence provided support or rejection of their single-sex education intervention.

- 2-B. Strategies to address non-compliance with evaluation and dissemination requirements by schools and school districts.
 - Identification Strategies: If schools fail to report their single-sex education, ED and other federal agencies have many ways to identify schools with deliberate single-sex education in addition to using self-reported Civil Rights Data Collection (CRDC) information on schools with single-sex classes. They can query Title IX coordinators, school administrators, and school boards, or learn about this single-sex education from other locally obtained information or from organizations concerned with advancing gender equality. ED can also conduct targeted compliance reviews.
 - **Corrective Strategies:** If the federal agencies find non-compliance with evaluation requirements or inappropriate decisions they must take corrective action. They should publicize that they are doing so as a way to remind others to fulfill their legal requirements.

²⁶ For example discussions and decisions are often available in the public school board minutes, but these decisions should be put on the schools' single-sex education evaluation web pages so they can be easily accessed along with evaluation plans and related reports.

- 2-C. Knowledge synthesis and dissemination strategies.
 - Using evaluations to add to research- based understandings of the comparative effectiveness of single-sex education and coeducation in decreasing sex discrimination.

Publicly available evaluations on websites will be a wonderful asset to researchers who are studying single-sex and coeducation. They could access, study, and provide summary information on the extent and nature of sex segregation in the public schools. They could also use this information to contribute to syntheses of research on specific types of single-sex education. In addition to posting their evaluation information on publicly accessible websites along with Title IX coordinator contact and compliance information, this evaluation documentation should be helpful to other schools facing decisions on single-sex education.

Since FMF is not suggesting that ED/OCR, DOJ or other federal agencies create a national database²⁷ on these single-sex education evaluations at this time, there are other simple ways to obtain and track this data by school districts, states, and nationally. The first way is to use the universal sample of schools in the Civil Rights Data Collection (CRDC) surveys. When this survey requests information about single-sex education in each school, it should request that the school provide a web-page URL which contains its documentation related to all of the evaluation requirements in this paper. The second way is for all schools to use common descriptors so that researchers and users can do a web search to find the evaluation documentation for each school, school district, or state education agency web page. For example, the required descriptor might be *evaluation of single-sex education*.

• The ED should report on a synthesis of the results of all these evaluations every two years to learn whether the single-sex programs are sex discriminatory and therefore should be discontinued or whether there is any rigorous evidence that the single-sex program is more effective than comparable equally well-resourced coeducation. This synthesis report also should provide evidence on the extent, nature, and impact of specific types of single-sex education in decreasing sex discriminatory outcomes as well as on the types of programs that increase sex discrimination as indicated by Phase II and Phase III evaluations.

²⁷ For example, FMF is not requesting a replica of the "Equity in Athletics Data Analysis Cutting Tool Website".

The first ED synthesis report on the impact of single-sex public education in the U.S. on gender equality would be issued in 2017 to allow time to collect data from Phase III evaluations. In addition to learning about patterns of impact for single-sex vis-à-vis coeducation, these biannual synthesis reports would provide incentives to schools to conduct rigorous high quality evaluations and report on them. If there is inadequate evidence of the comparative value of specific types of sex separation, ED, DOJ and others use all appropriate strategies to end this sex segregation and discourage other schools from wasting their resources on replication.

In conclusion, the required evaluations and the ED synthesis report will contribute to knowledge about the nature and impact of single-sex public education on ending sex discrimination, the sole purpose of Title IX. They will serve as accountability strategies for schools to comply with the evaluation requirements and help the federal agencies follow-up to ensure that federally supported education is free from sex segregation that increases -- rather than decreases -- sex discrimination.

SUMMARY

Detailed high quality evaluations with specific requirements will help ensure that any "approved" sex separation is legal. Good government principles of transparency and accountability will help improve education decision-making and add to the knowledge of what works or fails in these deliberate strategies to segregate and exclude participation on the basis of sex. By requiring that evaluation plans and results become publicly accessible on web pages, it will be more feasible to exchange information on what works related to specific single-sex programs as well as to increase aggregate knowledge about the nature and effectiveness of diverse single-sex strategies. It might even become feasible to understand their impact on different populations.

Additionally, OCR and DOJ can better support the implementation of all aspects of Title IX if they clarify the responsibilities of Title IX coordinators in this important decision-making about sex segregation, as well as their responsibilities for ensuring compliance with other aspects of Title IX as described in the previously referenced OCR Dear Colleague guidance letters. Since training and support for Title IX coordinators and others involved in decisions about single-sex education and many other ways to prevent sex discrimination are complex, ED and other federal agencies should also strengthen their federal infrastructure support for Title IX coordinators and other education equality advocates. The leaders of the federal agencies should also use public "bully pulpit" or educational strategies to share what is being learned about the challenges in implementing non-sex discriminatory sex separation in education.