



# TITLE IX & STEM

PROMISING PRACTICES FOR SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS



equal opportunity



# TITLE IX & STEM PROMISING PRACTICES FOR SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS

# A MESSAGE FROM NASA'S ASSISTANT ADMINISTRATOR FOR DIVERSITY & EQUAL OPPORTUNITY



Title IX of the Education Amendments of 1972 was passed to ensure equal opportunity regardless of gender in all academic activities. The law has been largely effective in accomplishing Congress' intent. For example, since 1972, women have made significant progress in many professional fields, such as medicine and law. However, one area where progress has lagged is that of science, technology, engineering, and mathematics, commonly referred to as STEM.

NASA has been actively reviewing efforts of its grant recipients to ensure gender nondiscrimination in STEM since 2003. This document was developed based on Title IX onsite reviews of STEM departments (e.g., aerospace and mechanical engineering, physics, astronomy, and planetary science) conducted by NASA at major universities across the U.S.

The document is intended as a resource guide for educational institutions receiving NASA financial assistance in STEM programs. It is intended to assist

educational institution Title IX Coordinators and their institutional partners in enhancing efforts to ensure equal opportunities, regardless of gender in STEM programs, and may have application institution-wide.

The STEM programs to which NASA provides financial assistance are the future of our Nation's science and engineering workforce, and in many cases, a pipeline to NASA's workforce. In this regard, NASA's Title IX efforts provide an excellent opportunity to work more effectively with our NASA-funded STEM programs. NASA does so by taking an innovative approach to Title IX compliance and technical assistance that includes reporting on promising practices among our many grant recipient institutions. NASA shares these practices to help institutions create and sustain the kinds of welcoming and inclusive program environments needed to attract and retain broadly diverse student populations.

We hope that you will find this document to be a valuable tool in our shared efforts to ensure equal opportunities in STEM programs, a critical pathway to the success of the Nation's science and engineering workforce in the 21st century.

A handwritten signature in blue ink that reads "Brenda R. Manuel". The signature is fluid and cursive.

Brenda R. Manuel  
June 2009

# TABLE OF CONTENTS

A Message From NASA's Assistant Administrator for Diversity & Equal Opportunity	2
Table of Contents	3
<b>INTRODUCTION</b>	<b>4</b>
Title IX's Mandate	5
NASA's Title IX Obligations	6
NASA Grant Recipients' Title IX Obligations	7
Title IX and STEM	9
<b>PROMISING PRACTICES</b>	<b>10</b>
Title IX Coordination	11
Title IX Policies and Procedures	13
Title IX Self-Evaluation	15
Admissions, Recruitment, Outreach, and Retention Practices	17
Academic Environment	21
Family Friendly Policies	24
Safety Policies	25
<b>CONCLUSION</b>	<b>27</b>
<b>APPENDIX A: NASA'S TITLE IX REGULATIONS</b>	<b>28</b>
Introduction	29
Coverage	34
Discrimination on the Basis of Sex in Admission and Recruitment Prohibited	38
Discrimination on the Basis of Sex in Education Programs or Activities Prohibited	40
Discrimination on the Basis of Sex in Employment in Education Programs or Activities Prohibited	46
Procedures	50
<b>APPENDIX B: DEPARTMENT OF JUSTICE TITLE IX Q&amp;A</b>	<b>51</b>
<b>APPENDIX C: SUMMARY LITERATURE REVIEW</b>	<b>57</b>
<b>APPENDIX D: RESOURCES AND PUBLICATIONS</b>	<b>60</b>

# Introduction

Since the inception of its Title IX compliance program, NASA has followed a philosophy of providing meaningful technical assistance to the institutions and programs it has reviewed under Title IX. In keeping with this philosophy, NASA balances its Title IX compliance assessments with efforts to identify and report on promising practices of the educational institutions the Agency reviews, in part so that we may share these practices with other institutions and stakeholders.

NASA has reviewed Title IX compliance in STEM programs in a host of areas, including recruitment, admissions, education and awareness, and physical safety of the program environment, to name a few. Among the many promising practices we have observed and report on in this document are:

- Ensuring that outreach efforts to K–12 include *STEM faculty, graduate, and undergraduate students of both genders interacting with younger students*, whether through visits to schools, guest lectures, science fairs, or other means, and that STEM research problems presented have a demonstrated objective and some application to real-world problems.
- Creating an image of the department as welcoming and inclusive regardless of gender by *showing the program's gender diversity in the visual images displayed in communications materials and publications*, especially program Web sites.
- Establishing strong Title IX coordination efforts, including collaborative partnerships with institutional leadership and academic departments to provide, among other things, *regular education and awareness opportunities regarding harassment and bias, and information on how to utilize mechanisms in place, e.g., internal complaint procedures for addressing such concerns*.
- Including specific examples of subtle gender bias to watch out for in the classroom setting (e.g., consistently recognizing and calling on students of one



gender, interrupting, listening less attentively to, and responding less fully to a particular gender) in training materials for faculty and staff employees.

- Conducting on-going Title IX self-evaluation efforts, including climate surveys and periodic *reviews of data broken down by gender on critical program processes, e.g., admissions, recruitment, and qualifying examinations to ensure program policies and practices are not having a negative impact on program participation*.

The many other promising practices cataloged in this document also help to show that effective Title IX compliance efforts continue to play an important role in ensuring equal opportunity in educational programs many years after the law was passed.

As President Barack Obama said when he was campaigning for the presidency, in his remarks on the 36th anniversary of Title IX, “[w]hen Americans need new skills to compete in this 21st century economy, women still make up fewer than one in five of our engineering graduates, and the number entering computer and information sciences programs is on the decline. . . . I am the father of two young girls who are growing up playing sports and who are beneficiaries of the doors Title IX opened. I’m running for President to make sure that the American Dream is within reach for every young girl in this country. That, after all, is what Title IX is all about—fulfilling our founding promise of equal opportunity for all. And that is the America we can build together—an America where our daughters have the same opportunities as our sons.”

# TITLE IX'S MANDATE

Title IX of the Education Amendments of 1972 is a Federal civil rights law prohibiting discrimination on the basis of sex in educational programs and activities receiving Federal financial assistance. The law promotes equality of opportunity, regardless of gender, and represents a national commitment to enhance educational and employment opportunities.

Many know of Title IX as a tool that has been used very effectively to encourage equal opportunity regardless of gender in athletics. However, Title IX also applies in the academic context. Under Title IX, educational programs receiving Federal financial assistance are prohibited from discriminating on the basis of sex and must ensure equal educational opportunities for all program beneficiaries. One important area in which concerns relating to gender equity still exist are the STEM fields.



# NASA'S TITLE IX OBLIGATIONS

Under Title IX, Federal Agencies awarding grants to educational institutions are obligated to take steps to ensure that such institutions do not discriminate based on gender. NASA currently provides hundreds of millions of dollars in Federal funding annually to some 400 grant recipient institutions, many of them university and college STEM programs. As a Federal Agency awarding funding to educational programs, NASA developed Title IX regulations to ensure that educational programs the Agency funds afford equal opportunities to their beneficiaries, i.e., students, regardless of gender, and are free of gender discrimination and/or harassment. (NASA's regulations appear at Appendix A).

Part of NASA's charge under its Title IX regulations, and more recently the Agency's 2005 Authorization Act, is to conduct compliance reviews of grant recipient programs to better ensure that the programs are providing equal opportunities regardless of gender, as required by Title IX<sup>1</sup>. In addition, in recent years, the issue of gender has become the focal point of a great deal of attention in the STEM fields, where the numbers of women remain low (particularly in such fields as physics, aerospace and electrical engineering, and computer science).

1. For more information on NASA Title IX compliance review programs, see "NASA Office of Diversity and Equal Opportunity Title IX Compliance Program Summary" (accessible at [http://www.hq.nasa.gov/office/codee/compliance\\_program.html](http://www.hq.nasa.gov/office/codee/compliance_program.html)).



In July 2004, the Government Accountability Office (GAO) issued a report, "Gender Issues: Women's Participation in Sciences has Increased, but Agencies Need to Do More to Ensure Compliance with Title IX." The report recommended that the Administrator of NASA take actions to ensure that compliance reviews of NASA grantees are conducted as required by the Title IX regulations. This recommendation was codified in NASA's 2005 Authorization Act, requiring the Agency to conduct at least two Title IX compliance reviews annually.<sup>2</sup>

2. See the NASA Authorization Act of 2005 codified at 42 U.S.C. § 16798(b).

# NASA GRANT RECIPIENTS' TITLE IX OBLIGATIONS

Under NASA Title IX regulations, educational programs receiving NASA financial assistance must, among other things, designate a Title IX Coordinator, adopt institutional grievance procedures, develop and disseminate policy, and conduct periodic self-evaluations focusing on admissions and treatment of students. Thus, basic compliance with the procedural requirements of NASA's Title IX regulations requires the following:

## *DESIGNATION OF A RESPONSIBLE EMPLOYEE ("TITLE IX COORDINATOR")*

Recipients of Federal financial assistance must designate at least one employee to coordinate Title IX compliance efforts and responsibilities, including complaint investigation into allegations of discrimination prohibited by Title IX<sup>1</sup>. The recipient must notify all its students and employees of the

name, office address, and telephone number of the employee or employees appointed to fulfill the Title IX coordination responsibilities.

## *ADOPTION OF COMPLAINT PROCEDURES*

Recipients of Federal financial assistance must adopt and publish grievance procedures providing for prompt and equitable resolution of student and employee complaints alleging any action that would be prohibited by Title IX.<sup>2</sup>

## *DISSEMINATION OF POLICY*

Recipients must take specific and continuing steps to notify beneficiaries, (e.g., notifying students and applicants for admission) that they do not discriminate on the basis of sex in the educational programs or activities that they operate, and that they are required by Title IX not to discriminate in such a manner.<sup>3</sup>

1. "Designation of responsible employee and adoption of grievance procedures," 14 C.F.R. § 1253.135(a).

2. *Id.* § 1253.135(b).

3. "Dissemination of policy," *Id.* § 1253.140.



### SELF-EVALUATION

Recipients must evaluate, in terms of the requirements of Title IX, current policies and practices and their effects concerning admission of students, treatment of students, and employment of both academic and nonacademic personnel working in connection

with the recipient's education program or activity. Recipients must modify any of these policies and practices that do not or may not meet the requirements of Title IX.<sup>4</sup>

### OTHER REQUIREMENTS AND GUIDANCE

Meeting these requirements establishes basic procedural compliance with Title IX. The regulations also require recipients to address aspects of program administration, such as admissions, recruitment, academic advising, policies pertaining to parental and marital status, and methods of administration or utilization of criteria that may have the effect of discriminating based on gender.<sup>5</sup> In addition, recipients may not otherwise limit program participation based on gender.<sup>6</sup>

These aspects of program administration point to environmental factors that can impact successful participation in STEM programs. Title IX creates a continuing obligation for such programs to assess their program environments to determine whether changes to program policies and practices are needed to enhance equal opportunity efforts where gender is concerned.

For additional considerations regarding the effective functioning of Title IX compliance efforts, such as coordination, policies, procedures, and self-evaluation, the U.S. Department of Justice Civil Rights Division document, "Questions and Answers on Title IX Procedural Requirements," is an excellent resource for recipients. This document may be found at Appendix B.

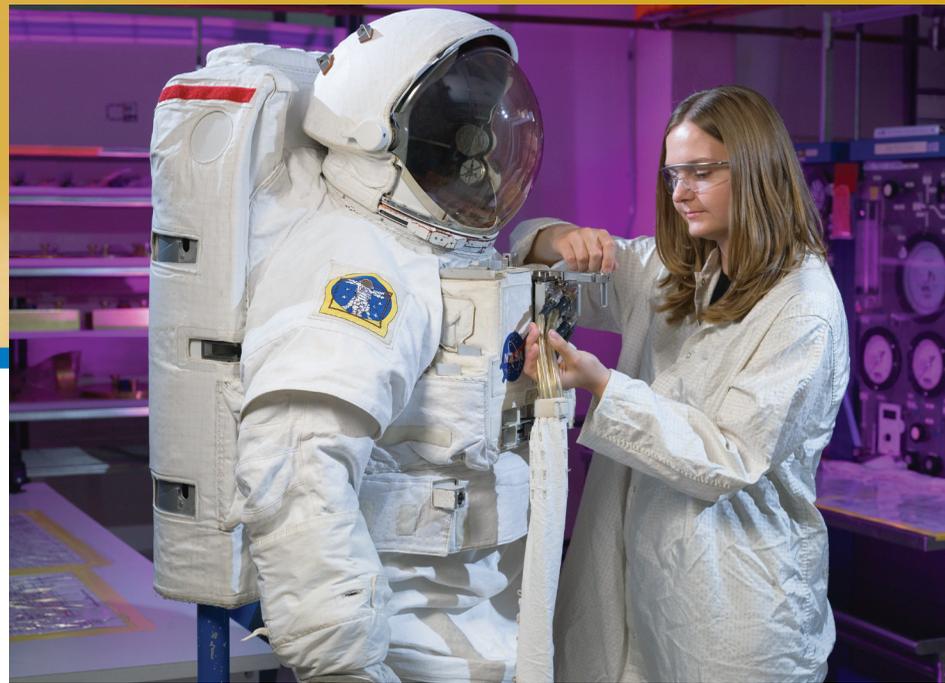


4. "Self-evaluation," *Id.* § 1253.110(c).
5. "Admission," *Id.* § 1253.300; "Recruitment," *Id.* § 1253.310; "Education programs or activities," *Id.* § 1253.400; "Counseling and use of appraisal and counseling materials," *Id.* § 1253.425; "Marital or parental status," *Id.* § 1253.445; "Enforcement procedures," *Id.* § 605.
6. "Education programs or activities," *Id.* § 400(a), (b)(7).

# TITLE IX AND STEM

In preparing to implement its Title IX program, NASA conducted a review of recent studies on gender issues in STEM fields, including Title IX policy and enforcement in the STEM context.<sup>1</sup> (A summary of the literature survey appears at Appendix D). The studies describe a broad range of gender-related issues in STEM.

For example, the 2004 report of the GAO (referred to above) described participation rates by gender, observing continued low participation for women in certain STEM programs, such as physics and some engineering disciplines. The GAO report noted the greater drop-off of women as compared to men at every stage, from high school to doctoral programs. The report highlighted the need for steps to help address this, such as strong outreach efforts to increase the interest of younger students in the sciences.<sup>2</sup>



Other reports and studies have cited concerns relating to environmental factors, such as:

- Few women faculty in many programs, and lack of visibility for women students and faculty in communications materials and the department's Web site, which can detract from efforts to show that the program is welcoming and inclusive regardless of gender.<sup>3</sup>
- Instances of inappropriate gender related remarks and conduct occurring in some program settings, highlighting the need for more effective education and awareness efforts regarding gender issues.<sup>4</sup>
- Lack of transparency in program practices and policies and access to program leadership, which in some cases has served to enhance differences in perceptions by gender regarding program responsiveness to students' academic needs.<sup>5</sup>

The promising practices NASA has observed in its Title IX review program *demonstrate how the Title IX compliance efforts of educational institutions can help to address such concerns* regarding gender and STEM.

1. See generally, National Academy of Sciences, National Research Council, *To Recruit and Advance: Women Students and Faculty in Science and Engineering* (2006); GAO, *Gender Issues: Women's Participation in the Sciences Has Increased, but Agencies Need to Do More to Ensure Compliance with Title IX* (July 2004); Catherine Pieronek, *Title IX and Gender Equity in Science, Technology, Engineering and Mathematics Education: No Longer an Overlooked Application of the Law*, 31 J.C. & U.L. 295 (2005); Elen Sekreta, *Sexual Harassment, Misconduct, and the Atmosphere of the Laboratory: The Legal and Professional Challenges Faced by Women Physical Science Researchers at Educational Institutions*, 13 Duke J. Gender L. & Poly 115 (Spring 2006); National Academy of Sciences, National Academy of Engineering and Institute of Medicine, *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering* (2006).

2. U.S. GAO report, "Gender Issues: Women's Participation in the Sciences Has Increased, but Agencies Need to Do More to Ensure Compliance with Title IX" (July 2004). In addition, the report recommended that agencies with science missions, such as NASA and the U.S. Department of Energy, conduct Title IX compliance reviews to ensure that grant recipient programs are providing equal opportunity regardless of gender.

3. See National Academy of Sciences, National Research Council (NRC), "To Recruit and Advance: Women Students and Faculty in Science and Engineering" (2006) (NRC Report), chap. 2, Recruiting Women Students, pp. 29, 41, 47.

4. See American Physical Society (APS) Committee on the Status of Women Site Visit Program, "Improving the Climate for Women in Physics," accessible at: <http://www.aps.org/programs/women/site-visits/summary.cfm>.

5. Ibid.

# Promising Practices



NASA seeks to provide meaningful technical assistance to STEM programs to help strengthen their existing Title IX compliance efforts, as well as to identify and report on the schools' promising practices for gender and STEM.

The promising practices in this guide are culled from NASA's Title IX compliance review program to date. The practices are organized according to relevant Title IX procedural requirements, such as Title IX coordination, as well as more substantive elements of program administration, such as admissions, recruitment, and outreach. Together, these practices reflect broad strategies for better ensuring equal opportunity regardless of gender, including establishing more effective outreach and recruitment efforts, and creating more welcoming and inclusive environments for a more broadly diverse STEM student body.

# TITLE IX COORDINATION

In addition to naming an official(s) to fulfill the roles and responsibilities of a Title IX Coordinator, recipients should take continuing steps to ensure that the name, contact information, and services provided by the Title IX Coordinator are well-publicized.<sup>1</sup> Some examples of promising practices regarding Title IX coordination NASA has observed in its reviews include:

## *COLLABORATIVE INSTITUTIONAL PARTNERSHIPS*

- A university Title IX Coordinator is among the membership in the highest decision-making bodies of the institution; for example, the Title IX Coordinator is a member of the University's Academic Council (consisting of the President, Provost, Chancellor, Vice Presidents, Deans, and other members of the executive management team) that meets weekly. In addition, the Title IX Coordinator meets monthly with the President, Provost, and other senior officers of the university and has regular informal interactions with all Academic Council members.
- A university Title IX Coordinator's office has formed collaborative partnerships with university administrative leadership that encompasses active participation on faculty search committees. For example, the Title IX Coordinator participates fully in the university's ADVANCE grant program, the ADVANCE Stewardship Committee, and the Commission on the Status of Women; and conducts faculty search committee briefings, providing a variety of education and awareness materials. These include information on the Title IX Coordinator's office, laws covering sex discrimination (including marital status, and pregnancy discrimination), and gender equity related publications.
- A Title IX Coordinator's office conducts, as a joint initiative with the university's Department of Education Policy and Leadership, an Intergroup Dialogue Program. The Title IX Coordinator also serves as an ad hoc member of the university's Sexual Assault Task Force and partners with the university police and other local police task forces regarding campus safety. For example, the Title IX Coordinator's office has been instrumental in campus efforts to address near-campus bar promotions of unsafe events (e.g., "women's lockdown" at one bar), helping to provide the needed education and awareness to fraternity leaders and local proprietors.



1. "Designation of responsible employee and adoption of grievance procedures," 14 C.F.R. § 1253.135(a).

#### DEDICATED SUBJECT MATTER SPECIALISTS

- A university has a Title IX coordination team that includes a dedicated full-time position for sexual harassment and sexual assault and/or domestic violence, demonstrating the university's recognition of its critical role and responsibility to address issues of sexual harassment, campus assault, and violence.

#### EDUCATION AND AWARENESS EFFORTS

- A Title IX Coordinator's office offers a training orientation to all new graduate teaching assistants that covers roles and responsibilities associated with Title IX compliance. The Title IX Coordinator works to ensure that training participants view Title IX as integral to their area or program within the university. To this end, training emphasizes proactive efforts to ensure Title IX compliance and focuses on inclusion and the creation of a respectful environment. Significantly, efforts include training provided on an ongoing basis to faculty and students on sexual harassment.
- A Title IX Coordinator's office provides training through the Sexual Harassment Prevention Program. This office provides training to specific campus groups at the request of campus equity officers and conducts sexual harassment prevention training in dorms; it also trains all Resident Assistants (RAs) on sexual harassment. The majority of campus units mandate sexual harassment training for their employees on a periodic basis. Sexual harassment training is encouraged, but optional in units reporting to the Vice President of Academic Affairs.
- A Title IX Coordinator's office leads an Inter-group Dialogue Program (IDP) focusing on specific diversity related topics, e.g., gender, religion, sexual orientation. Each IDP runs for eight weeks, two hours per week, to discuss the history

of tension between groups and work to resolve conflicts. All members of the campus community are invited to participate.

#### BROAD INFORMATION DISSEMINATION

- A Title IX Coordinator prepares annual updates on the work of his office and hosts an annual event updating the campus on its services. The Title IX Coordinator's office disseminates materials using *www.myspace.com* and a freshman level survey course, which includes a diversity component.
- A Title IX Coordinator's office introduced a new university-wide initiative called *Campus Commitment*. The *Campus Commitment* provides clear definitions of discrimination and harassment prohibited by university policy, as well as where and how to report concerns. Information regarding the *Campus Commitment* can be accessed from the Title IX Coordinator's office Web page. The *Campus Commitment* initiative includes a training component and is part of new student orientation.

#### INNOVATIVE INFRASTRUCTURE

- A University System has a Title IX Coordinator at each of its campuses with the Title IX Coordinator at the flagship campus serving as a "coordinator of coordinators," in the event of a system-wide discrimination issue. In addition, the Title IX Coordinator is assisted in his work by a full-time Gender Equity Specialist, who receives complaints and provides technical assistance to the university community regarding gender equity issues.
- A university deploys staff from its Title IX Coordinator's office to the departments, labs, and centers of the university and regularly observes environments for morale and climate issues with both employees and students. The staff has access to the head of the unit to discuss issues that arise.

# TITLE IX POLICIES AND PROCEDURES

Title IX requires schools to have grievance procedures allowing employees and students to file grievances alleging sex discrimination, including sexual harassment. The NASA Title IX regulations require that recipient educational institutions adopt and publish grievance procedures providing for prompt and equitable resolution of student and employee complaints alleging any action that would be prohibited by Title IX.<sup>1</sup> Such procedures *must be broadly disseminated* to ensure that all members of the campus community are aware of the institution's Title IX policy and the process for addressing concerns regarding discrimination or harassment.<sup>2</sup>

Some examples of promising practices regarding Title IX coordination NASA has observed in its reviews include:

1. "Designation of responsible employee and adoption of grievance procedures," 14 C.F.R. § 1253.135(b).
2. In this regard, NASA's Title IX regulations require grant recipients to take specific and continuing steps to notify students, employees, applicants for admission and employment, and unions or professional organizations having collective bargaining or professional agreements with the recipient, that it does not discriminate based on gender in the educational programs or activities that it operates, and that it is required by Title IX not to discriminate in such a manner. "Dissemination of policy," 14 C.F.R. § 1253.140.

Under DOJ guidelines, Federal agencies and recipients must also include information on civil rights requirements, complaint procedures, and the rights of beneficiaries in handbooks, manuals, pamphlets, and other materials. "Public dissemination of Title VI information," 28 C.F.R. § 42.405.

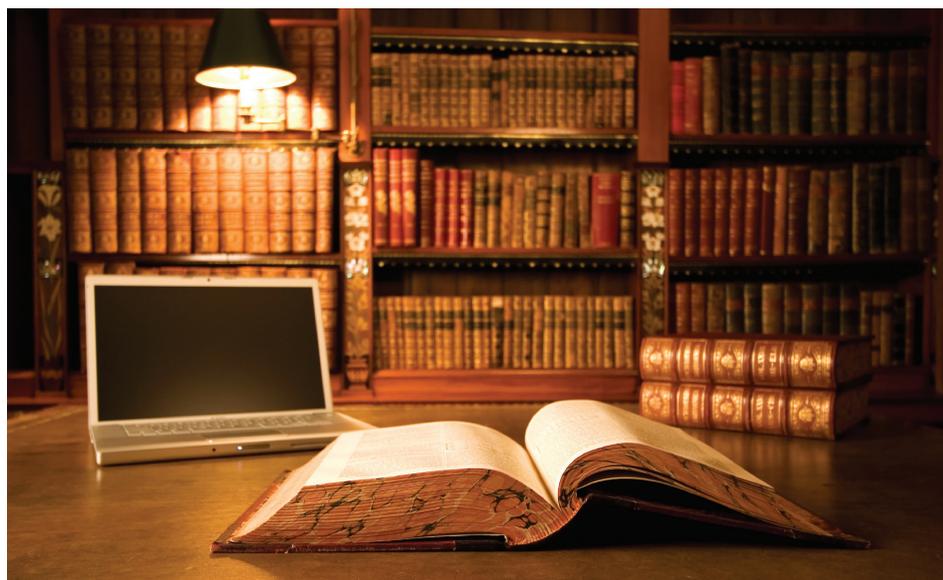
In addition, the U.S. Department of Education Office for Civil Rights states in guidance that "[a] grievance procedure . . . cannot be prompt or equitable unless students know it exists, how it works, and how to file a complaint. U.S. Department of Education, Office for Civil Rights, "Revised Sexual Harassment Guidance: Harassment of Students by School Employees, Other Students, or Third Parties," (Jan. 19, 2001), § IX. "Prompt and Equitable Grievance Procedures" (accessible at <http://www.ed.gov/about/offices/list/ocr/docs/shguide.html>).

## INNOVATIVE PROCEDURAL PROVISIONS AND PRACTICES

- A university's Title IX grievance procedures include a provision for the office of the Title IX Coordinator to conduct "Administrative Reviews." A "Type 1" Administrative Review is an investigation conducted at the request of an Administrator who has concerns that discriminatory actions may be occurring within his unit.

## BROAD POLICY/PROCEDURES DISSEMINATION

- A university annually distributes its Title IX policy and procedures in hard copy format and electronic format to university employees, accompanied by a memorandum from the President of the university. The university disseminates Title IX policy and procedures to students each semester via reference in the university undergraduate catalogue and posting on the university Web site.
- A university receiving NASA funding electronically disseminates information from Federal agencies regarding Title IX rights, such as the



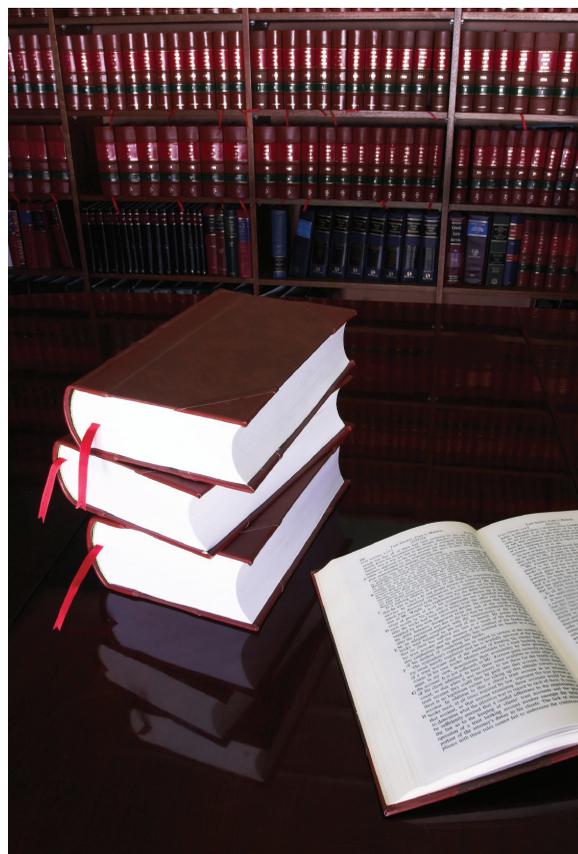
NASA brochure “Nondiscrimination and Equal Opportunity in NASA Assisted Programs: Title VI of the Civil Rights Act of 1964 and Related Laws,” which includes specific information on Title IX, including the right to file a Title IX complaint with NASA. Such dissemination includes posting in prominent places on STEM program Web sites, the home page of the Title IX Coordinator’s Office, and periodic dissemination, e.g., each semester, to students in programs receiving funding from the Federal agency that prepared the information.

- A university’s Sexual Harassment Policy is distributed annually in hard copy and electronic format to all employees. The Policy and Procedures are accompanied by a memorandum from the President of the university to all faculty, staff, and student employees (including graduate student employees). In addition, the Physics Department forwards a departmental Policy on Harassment, based on the university’s policy, to all faculty, staff, and students in the university physics community. This departmental policy on harassment includes information on Federal agency Civil Rights/EO components that will receive and process harassment complaints.

#### EFFECTIVE USE OF WEB SITES

- A university’s STEM programs have placed detailed information regarding gender equity and non-discrimination prominently on the home pages of their Web sites. For example, in addition to a general policy statement, the programs have prominently placed a number of links to resources and information regarding Title IX both internal and external to the university, e.g., sexual harassment policies and procedures and online training and the NASA brochure on equal opportunity and nondiscrimination.

- A university issued a revised version of its Guidelines for Raising Complaints of Harassment, which has been posted on the university’s Web site. This guide clearly states student rights to file a complaint with external agencies, resources available, and statutes that are relevant to such issues.
- The Web site for a Title IX Coordinator’s office links directly to the U.S. Department of Education Office for Civil Rights, among other Federal and State links, helpful for any member of the university community to learn more about their rights and protections under the civil rights laws.



# TITLE IX SELF-EVALUATION

Title IX regulations call on universities and colleges to evaluate their current policies and practices and the effects thereof concerning admission of students, treatment of students, and employment of both academic and nonacademic personnel working in connection with the recipient's education program or activity.<sup>1</sup> Such evaluations may include analysis of:

- the availability of mentoring relationships;
- the standards and practices used for hiring and promotion decisions;
- criteria for assignment of advisors to graduate students, allocation of lab space and time, opportunities to edit prestigious professional journals, receipt of funding for research projects and the like, and
- periodic campus climate and culture surveys.

## ADVISORY COMMITTEES

- A university has formed a Commission on the Status of Women that reports to the university President on issues concerning women—faculty, staff, and students on all campuses. Examples of issues addressed by the commission include: child care, campus safety, equitable practices in hiring, pay, promotion and tenure, recourse for sexual harassment, and compliance with the mandates of affirmative action and equal opportunity.
- A university Physics Department Chair invites a Visiting Committee (an evaluative body comprised of outside experts in the field), which advises on all aspects of education, research, and administration, including equal opportunity and diversity related matters, to come to the department every two years. The Visiting Committee hears concerns raised by both faculty and students. The results of the Visiting Committee's assessment are submitted to the Physics Council which then uses them in developing department policy.

## FACULTY REVIEW COMMITTEES

- A university astronomy program committee is charged with creating more equitable representation between male and female faculty members and periodically reviewing issues such as compensation and bonuses.

## SURVEYS AND ASSESSMENTS

- A university Physics Department regularly administers surveys, including regular surveys of students, and other means of gathering information on a host of issues that can be used to inform academic policy and practice. For example, the Physics Department conducts Graduate Program Surveys that are sent to accepted students who decline enrollment at the university. The survey asked students who decided not to attend the university's Physics Graduate Program their primary reason for declining to attend, any improvement the students felt should be made to the university's Physics Open House, and the school they decided to attend instead. By asking these questions and tracking the responses, the university's Physics Department provides itself with an important self-evaluation tool whose uses include making more informed decisions on ways to increase women's participation in the program.
- A university Physics Department Graduate Student Council developed a student survey that included gender equity issues in the physics program. For example, the survey asked questions such as whether graduate students, based on first-hand experience or discussions with other students, believe there is "any problem with sexual harassment in the department," and whether or not they believe there "is a real and significant bias against women in the department (even if it does not strictly fall under the

1. "Self-evaluation," 14 C.F.R. § 1253.110(c).

definition of sexual harassment)?” The survey was disseminated to graduate students and its results, which showed clear differences in perception between men and women students, have served as the impetus for policy and practice



enhancements within the department, such as required sexual harassment training for graduate teaching assistants.

- A university conducts a number of periodic evaluations that address Title IX requirements. For example, the university’s Equity Council continually monitors hiring practices through the collection and review of employment search data. With respect to students, a Campus Assessment Working Group analyzes gender issues through surveys of the student population.
- A university requires all colleges and departments to prepare an annual Diversity Self-Assessment. The most recent version of this document for the College of Engineering and the Aerospace Engineering Department provides detailed information on diversity efforts and next steps.
- A university Physics Department conducts exit surveys with its students and surveys of its alumni. Utilization of these tools allows the department to capture important information from these targeted groups regarding the program environment.

#### *WEB SITE ENHANCEMENTS*

- A College of Engineering is enhancing its Web sites to provide customized information on where specifically visitors to its Web pages are focusing their attention. These enhancements are designed to assist the engineering program to better understand the interests of students that are investigating the program and the pattern of where they go on the Web helps the program to see their interests. The extent to which engineering Web sites include information regarding gender, including images of gender diversity, will help the program to better understand interests of students specifically in this regard, thereby assisting self-evaluation efforts.

# ADMISSIONS, RECRUITMENT, OUTREACH, AND RETENTION PRACTICES

Under the NASA Title IX regulations, recipients may not discriminate on the basis of sex in admissions and recruitment.<sup>1</sup> Some examples of promising practices regarding admissions, recruitment, and related areas NASA has observed in its reviews include:

## *DEMONSTRATED LEADERSHIP COMMITMENT*

- A university's Aerospace Engineering Department faculty and staff commitment to gender diversity is evident in a variety of tangible actions and efforts. Each spring, as prospective students are making final decisions on colleges and majors, aerospace engineering faculty members make personal phone calls to prospective students. The Research Fellow Program provides undergraduate students an opportunity to collaborate on research with faculty members. Women undergraduates may choose to work with women faculty members conducting research in a field in which the student is interested. The Aerospace Engineering Department assists with programs sponsored and conducted by the Women in Engineering (WIE) office, providing faculty (both male and female) an opportunity to speak with the participants about the aerospace undergraduate curriculum and profession as a whole. The Aerospace Engineering Department participates in a number of outreach programs to junior high school and high school students and prospective aerospace engineering majors in part through the department's Student Ambassadors Program, in which diverse groups of undergraduate and graduate students visit K–12 programs to interact with younger students.
- A university astronomy program's leadership made a conscious decision to focus on teaching, student advising, and the academic environment for students. The program director and top



program leadership maintain open door policies. Program faculty are required to teach and take on student advisees. The program also implemented a Research Undergraduate Program to mentor and engage undergraduate students who have an interest in pursuing a graduate degree in astronomy. Faculty are encouraged to be engaged with students regarding program issues, with one female faculty member hosting a monthly lunch for faculty, graduate students, and post-doctorate students interested in women's issues. This provides a valuable support system for participants.

- A university's College of Engineering allocates funds to departments based on an algorithm, including characteristics of the current student population. Diversity is one of the criteria for how well each department is doing (along with others, of course, such as grade point average [GPA] and the Graduate Record Examination [GRE]). Funding is "outcome based," i.e., the incentive

1. "Admission," 14 C.F.R. § 1225.300; Recruitment § 1253.310.

is built in and reported on so that departments receive money based on what they have already accomplished.

- A University Strategic Plan describes “Five Initiatives,” including ensuring “a university environment that is inclusive as to diversity and fosters a spirit of community among faculty, staff, and students.” This initiative has a number of specific and measurable steps for implementation, e.g., developing coherent and comprehensive strategies to increase the diversity of faculty and staff.
- A university College of Engineering Five-Year Strategic Plan includes among its six strategic initiatives focusing on steps to ensure an environment that promotes diversity and fosters a spirit of collegiality. The initiative includes specific steps such as continuing to strengthen outreach programs aimed at minority and female high school students, and creating more opportunities to celebrate and regard success and excellence of faculty, staff, and students.

#### ADVISORY EXPERTISE

- A university Aerospace Engineering Department established an Aerospace Engineering Advisory Board (the Advisory Board). The Advisory Board members are private and public sector professionals who provide advice to the Aerospace Engineering Department, bringing together both industry and academic perspectives. The Advisory Board advises on Aerospace Engineering Department policy, including efforts to sustain the program’s commitment to diversity.

#### ADMISSIONS CRITERIA REVIEW

- A university astronomy program conducted a careful assessment of the Physics GRE as an admissions criterion, spearheaded by a faculty member who provided data on gender and the

Physics GRE to her colleagues. This effort helped to ensure the use of multiple criteria in admissions review and is an excellent example of a proactive self-evaluative effort regarding critical program processes, e.g., admissions, to minimize the potential for the process to negatively impact highly qualified applicants.



### *DEDICATED STAFF FOR RECRUITMENT AND OUTREACH EFFORTS*

- A university Aerospace Engineering Department has committed a significant amount of resources to its recruitment and outreach efforts, including a full-time Recruitment and Outreach Coordinator. The Aerospace Engineering Department utilizes the services of a full-time WIE Program Director who holds a doctorate in industrial and systems engineering. The WIE Director has a full-time staff assistant. With newly dedicated office space and a full-time staff person, the WIE Director describes a concerted, focused effort regarding outreach and recruitment. Both the WIE Director and Recruitment and Outreach Coordinator are fully integrated into decision-making within the department. For example, the WIE Director reviews College of Engineering publications and provides input. Major WIE activities include: peer mentoring and professional engineering mentoring programs, summer programs to talk to high school teachers about doing a better job of interesting women in math, and measurement of program outcomes and success.
- A university has a long-standing Women in Science and Engineering (WISE) program as a cooperative effort between the College of Engineering and the College of Literature, Science, and the Arts. The WISE program aims to increase the number of women pursuing undergraduate and graduate degrees and careers in STEM. The WISE program also contributes to research and evaluation on issues relating to women in STEM. The WISE program conducts numerous outreach and recruitment programs aimed at K–12 students, such as the Sally Ride Science Festival, the Grace Hopper Project, Career Day Workshop speakers, the Southeast Michigan Science Fair, and Introduce a Girl to Engineering Day. The WISE program

also conducts outreach and recruitment aimed at undergraduate and graduate students, including workshops, lectures, and supplemental instruction.

### *DEDICATED HOUSING PROGRAMS*

- A university has developed, through its WISE programs, a Residence Program (WISE RP) designed to encourage WIE and science. WISE RP is an academically supportive living/learning community for women who are interested in academic majors and careers in science, mathematics, and/or engineering. WISE RP strives to support the academic pursuits of its students and to build a supportive social community. The community is comprised of approximately 100 first year women, 33 returning students who serve as Peer Mentors and Program Board Members, and four upper-class women who are Resident Advisors. Each first-year student is paired with an upper-class peer mentor and is encouraged to participate in the WISE RP study groups.

### *VISIBLE GENDER DIVERSITY IN COMMUNICATIONS MATERIALS*

- A university's Aerospace Engineering Department communications materials, such as its honors program brochure and its Web site, show gender diversity, highlighting successes of faculty and students, and giving equal visibility to achievements of male and female faculty and students. An excellent example of emphasizing the gender diversity of the program in communications materials is the School of Engineering's newsletter, which featured a cover article, entitled "Opening Doors for Female Engineering Students." The article describes the School of Engineering's efforts to raise student interest in engineering at the K–12 level, work in building support networks for women students, and commitment to increasing the number of women on the Engineering Department faculty.

#### *EFFECTIVE TOOLS FOR MEASURING SUCCESS*

- A university WIE Director is conducting research on program delivery and impact of the Research Internships in Science and Engineering (RISE) First Year Summer Experience (FYSE) Program. The RISE FYSE Program is designed to introduce female students to college life and the STEM academic environment, and to help them develop tools to deal with potential barriers to success in STEM, including “internal” barriers such as lower levels of self-efficacy, confidence, and satisfaction as compared to men. The directors of RISE have secured funding from the National Science Foundation to conduct research investigating factors that influence choice of academic major among first year female students who have not yet committed to STEM fields, with the goal of increasing the pipeline of women interested in pursuing STEM majors.
- Statistical data for outreach and summer programs are maintained by a university’s Office of Undergraduate Recruitment and Special Programs. Results of the statistical data are used to assess the effectiveness of the outreach programs with respect to the enrollment of women in the School of Engineering. Information includes application rates to the university and the School of Engineering, offers of admission from the School of Engineering, and the percentage that matriculates to the School of Engineering. Future expansion of this data is planned to include tracing the retention and graduate rates of these students.

#### *INNOVATIVE ACADEMIC AND CAREER DEVELOPMENT PATHS*

- A university Physics Department offers two different programs leading to a bachelor of science in physics, giving students the opportunity to tailor their study to their individual career goals. Since the inception of the flexible option,

the enrollment of female undergraduate physics majors has increased significantly.

- A university offers a Path of Professorship program, a career development program sponsored by the Graduate Student Office and planned by the Associate Dean. The program focuses on faculty development for women graduate students and post-doctoral researchers. Workshops are lead by women faculty, department chairs, deans, provosts, and other local universities.
- A university funds a distinguished postdoctoral fellowship program that identifies, recruits and supports the most talented and promising young physicists at an early state of their careers, consistently interviewing and making offers to highly-qualified female candidates at a higher rate than the fraction of women in the applicant pool.
- A university’s Undergraduate Research Opportunity Program was one of several campus initiatives created to improve the retention and academic achievement of under-represented students at the university. The program creates research partnerships between first and second year students and faculty. The program started with 14 student/faculty partnerships and continues to grow. Today, approximately 900 students and over 600 faculty researchers are engaged in research partnerships. The Undergraduate Research Opportunity Program also provides academic support services, from peer advising to career planning, and learning skills workshops.

#### *FACULTY RECRUITMENT EFFORTS*

- A university Physics Department ensures that all faculty search committees are gender diverse; the department pursues promising female candidates by tapping professional networks and conducting personal outreach and prepares detailed reports justifying candidate selection.

# ACADEMIC ENVIRONMENT

The NASA Title IX regulations provide that a recipient shall not, on the basis of sex, exclude from participation in, deny the benefits of, or otherwise limit any person in any advantage or opportunity pertaining to academic, extracurricular, research, occupational training, or other education program or activity operated by the recipient.<sup>1</sup> The Title IX regulations explicitly state that a recipient may not discriminate on the basis of gender with regard to career counseling or guidance.<sup>2</sup>

In addition, the Title IX regulations incorporate by reference the NASA Title VI regulatory provision prohibiting a recipient from utilizing methods of administration which have the effect of defeating or substantially impairing accomplishment of the objectives of the program for an individual based on sex.<sup>3</sup>

Some examples of promising practices regarding academic environments NASA has observed in its reviews include:

## ADVISING AND COUNSELING

- A university's Aerospace Engineering Department students often have more than one faculty member from whom they seek advice, in addition to their formally assigned advisor. The Aerospace Engineering Department does not place any restrictions on students seeking to change advisors.
- Requests for new advisors are granted automatically to undergraduate students, with no questions asked. Although NASA did not hear that the practice was used by students to avoid alleged gender bias, it could serve that purpose.
- A university's Physics Department faculty receive feedback from counselors with the university's

1. "Education programs or activities," 14 C.F.R. § 400(a), (b)(7).

2. "Counseling and use of appraisal and counseling materials," 14 C.F.R. § 1253.425.

3. "Enforcement procedures," 14 C.F.R. § 605.



Student Support Services on the kinds of academic issues students raise, which helps faculty to be more effective in their interactions with students, e.g., make adjustments in their teaching style.

- A university College of Engineering has established an Engineering Advising Center to support first-year and undeclared students in their transition from high school to the rigorous academic demands of the College of Engineering. The Engineering Advising Center fosters success by assisting students in the development of their academic plans and career goals, as well as their personal decision making.

## CLASSROOM EXPERIENCES

- A university has a "Statement on Classroom Climate" published in its *Faculty Handbook of*

*Policies and Resources.* The statement lays out the basic policy: the university values the diversity of its student body and is committed to providing a classroom atmosphere that encourages the equitable participation of all students. The statement also emphasizes the need for classroom instructors to be equitable in opportunities provided for contributing in class and the need to ensure that the classroom is a “hospitable environment” for everyone, e.g., no joking at the expense of any group.

- A university’s aerospace engineering introductory class is designed to appeal to a diverse group of students. The course includes numerous presentations from a racially and gender diverse group of individuals and is a means of providing role models for students interested in pursuing careers in

engineering. The course addresses the practical applications or “service orientation” suggested in the research literature as means of appealing to a diverse group of students.

- Within a university Aerospace Engineering Department, some faculty members include gender diversity among the criteria used in making classroom research team assignments, to better ensure that women students do not feel marginalized by being the only female on a given team. Several faculty members reported that they considered factors such as personal preferences for team partners, range of academic skills, and skills in particular areas, e.g., computer-aided design, when making team assignments.
- A university’s teaching assistant handbook, provided to new teaching assistants in an orientation seminar, provides specific examples of subtle gender bias to avoid in the classroom setting. The examples include such things as “habitually recognizing and calling on men more often than women in class discussions;” “interrupting female students more often than males, or allowing others in class to do so;” and “listening more attentively and responding more extensively to comments made by men than to those made by women.”

#### *SERVICE-ORIENTED STUDENT ENGINEERING WORK*

- A university College of Engineering, through its industrial and systems engineering program, organized a number of service-oriented student engineering projects. For example, the industrial and systems engineering program organized a group of its students to upgrade the storage facilities of a local nonprofit’s organization building. The College of Engineering continues to work with faculty and students to identify service-oriented projects as a critical component of the curriculum, providing students



the opportunity to use their engineering skills and capabilities in the community.

#### *DEPARTMENTAL EDUCATION AND AWARENESS EFFORTS*

- A university's College of Engineering partners very effectively on education and awareness efforts with the university's Center for Research on Learning and Teaching. The Center, at the request of the university's College of Engineering, has established a branch to specifically work with engineering students. The Center has hired two engineers with doctorates to serve as the primary professional staff for the engineering branch. The Center has developed 18 short plays, which use professional actors and are aimed at generating dialogue on gender issues among graduate students and faculty. Among the sketches they regularly perform is "Gender in the Classroom," which treats issues of gender bias that may arise in the classroom setting. Following performance of the sketch, there is a facilitated dialogue with the audience. The Director of the Center stated that typically someone in the audience will say something like, "That never happens here," and one of the female students will respond with something like, "This is my daily life you are seeing here." Student instructors and faculty report that the sketches have had a very positive impact on their recognition of and ability to deal with gender bias in the classroom. The College of Engineering requires prospective graduate student interns to attend an orientation before assuming their teaching duties.
- A university Physics Department created a training program on sexual harassment and cultural awareness for teaching assistants. The department has also conducted several sessions for staff on the university's policy on harassment, methods for receiving complaints, and the importance of increasing cultural diversity. In addition, staff members

who are complaint handlers have attended external training programs through the university.

- A university's program director for ADVANCE held an orientation for the Physics Department faculty search committee on how unconscious gender bias can play a role when recruiting new faculty, providing an education and awareness opportunity to current faculty. The orientation focused on ways in which subtle bias may present itself in the search process, such as differences in the way recommendations are written for male versus female candidates, e.g., women applicant recommendations focused more on administrative work abilities while male applicant recommendations focused on hard-core research.

#### *FOSTERING A SENSE OF COMMUNITY*

- A university Aerospace Engineering Department's efforts to create a welcoming environment for all students and an understanding of diversity principles include regular Town Hall Meetings instituted by the Department Chair. The Chair uses these gatherings in part to publicly honor students who are doing excellent work. The Town Hall Meetings afford opportunities for open dialogue and recognition of students, helping the Aerospace Engineering Department to demonstrate its commitment to inclusion and celebrate its diversity.
- A university Physics Department funds the student-run Women in Physics program to foster community among women graduate students, postdoctoral researchers, and faculty members in the Physics Department. The Women in Physics program provides networking and mentoring opportunities for female graduate and undergraduate students. Due to the efforts of the program, a room for women graduate students is planned for the new space that houses the Physics Department on the main campus.

# FAMILY FRIENDLY POLICIES



The NASA Title IX regulations include a detailed provision on matters pertaining to marital and parental status.<sup>1</sup> Generally, under the regulations, a recipient may not apply any rule concerning a student's actual or potential parental, family, or marital status that treats students differently on the basis of sex. Regarding pregnancy and related conditions, the regulations state that a recipient may not discriminate against any student on the basis of the student's pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery, unless the student requests voluntarily to participate in a separate portion of the program or activity of the recipient.

Some examples of promising practices regarding family friendly policies NASA has observed in its reviews include:

## *ON-CAMPUS CHILD CARE FACILITIES*

- A university provides on-campus child care comprised of several facilities across campus, with priority access for faculty, staff, and students. The university has responded to increased child care needs

by significantly expanding the facilities, creating a new state-of-the-art child care center, and renovating and reorganizing existing child care centers on campus. In addition, the university has launched a new "child care co-operative" pilot program and established child care scholarship programs.

## *EXPANDED HEALTH COVERAGE*

- A university Aerospace Engineering Department provides full health care coverage, including spousal and child coverage, to graduate students receiving fellowships, research assistantships, and teaching assistantships.

## *INSTITUTIONAL COMMITMENT TO FAMILY FRIENDLY POLICIES*

- A university's institution-wide commitment to family friendly policies is demonstrated through a number of policies and practices including: family housing for students with children and on-site day care; a Work/Life Resource Center that provides services and resources to assist faculty, staff, and students during pregnancy and in obtaining child care and flexible work schedules; a host of family friendly programs for students, including permitting graduate students to take up to one year leave of absence for childbearing and dependent care; and a need-based Child Care Subsidy Program and need-based Child Care Tuition Grant Program.
- A university has established a Center for Work, Family, and Personal Life to help foster a welcoming and supportive environment for those who live, work, and study at the university. In addition to providing direct services in the areas of parenting, child care, school information, and job flexibility, the center conducts research and advocacy into work/life issues and helps develop policies and programs to improve the quality of on- and off-campus life at the university.

1. "Marital or parental status," 14 C.F.R. § 1253.530.

# SAFETY POLICIES

The NASA Title IX regulations provide that a recipient shall not, on the basis of sex, limit any person in any advantage or opportunity pertaining to academic, extracurricular, research, occupational training, or other education program or activity operated by the recipient.<sup>1</sup> The Title IX regulations incorporate by reference the NASA Title VI regulatory provision prohibiting a recipient from utilizing methods of administration which have the effect of defeating or substantially impairing accomplishment of the objectives of the program for an individual based on sex.<sup>2</sup>

Some examples of promising practices regarding efforts to better ensure the physical safety of program environments NASA has observed in its reviews include:

## *NIGHTTIME TRANSPORTATION SERVICES*

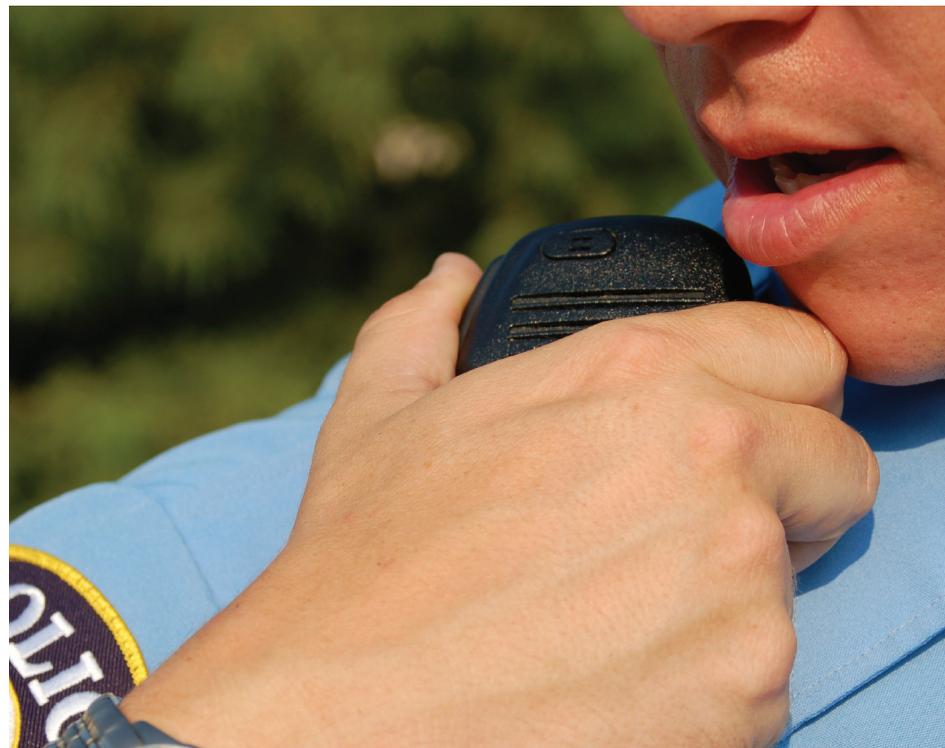
- A university operates a regular shuttle service to facilitate transport around campus, as well as N.I.T.E. Ride, an on-demand curb-to-curb escort bus service when shuttle buses are no longer in operation. The university's Department of Public Safety also offers a personal escort service for anyone who feels unsafe when walking across campus at night.
- A university operates a Safe Ride program, a free transportation service. This fleet of vehicles, two of which are wheelchair accessible, drives on a set route to the main campus, as well as to all graduate and undergraduate living groups in the area. The drivers have direct radio contact with the university police at all times. After hours of operation, and until daylight, the university police give rides in marked cruisers on request to areas on and around campus.

1. "Education programs or activities," 14 C.F.R. § 1253.400(b)(7).

2. "Specifically discriminatory acts prohibited," 14 C.F.R. § 1250.103-2(a)(3).

## *BROAD INFORMATION DISSEMINATION*

- A university's Department of Public Safety maintains a Web site providing extensive information on campus safety and security, including crime reports and incident logs, victim recourses, and crime alerts. The Department of Public Safety runs a Threat Assessment Program in which trained personnel act as Case Management Officers and assist in assessing threats. Cases may include harassment, stalking, and/or workplace or relationship violence. The Department of Public Safety provides crime prevention programs to students, faculty, and staff on request. These include, among others, timely warning notices regarding crimes, which may present a threat to the campus community, rape aggression defense, and sexual assault awareness.



- A university police department maintains a Web site providing extensive information on campus safety and security including police bulletins and incident logs.
- A university's Department of Public Safety publishes a 38-page *Campus Safety Handbook*. This document provides a quick reference guide on a variety of topics such as medical and counseling services, transportation resources, assault awareness, and workplace violence. The Department of Public Safety has a Web page that includes all of this information.

#### SEXUAL ASSAULT PREVENTION

- A university's Oasis Program was established to provide a variety of services to students, staff, and faculty who are impacted by sexual assault, relationship violence, and stalking. The Oasis Program partners with local community service agencies to provide coordinated responses to, and work toward the prevention of, all forms of interpersonal violence. The program's mission/goal is particularly effective in stating the need for its services, stating that the Oasis Program serves to "contribute to the quality of the overall campus climate, to the safety, empowerment and healing of victim/survivors, to the accountability of offenders, to the success of students remaining productive in their role as students and in the pursuit of their degrees, and to the success of staff and faculty remaining productive in their role as employees."

#### INSTITUTIONAL COMMITMENT TO SAFETY

- A university's police auxiliary maintains a roving patrol by vehicle of the university's surface parking lots and five garages as well as those of its golf course and off-campus residence halls. The campus has approximately 300 video surveillance cameras positioned in strategic locations around campus,

of which the police monitor approximately 181 on a 24 hour/7 day a week basis. The university also has 300 emergency "blue light" telephones positioned around campus for use by the campus community in the event of a safety risk.

- A university's institutional commitment to safety includes a variety of practices such as: ensuring a sufficient number of campus police, posting safety messages in the dormitories, training resident advisors on safety, and providing nighttime escort services. Graduate students having to work into the early hours of the morning are provided reserved parking spots or special parking permits to park close by their lab or building. In addition, the university utilizes swipe cards, surveillance cameras, and lighted paths with emergency phone boxes.



# Conclusion

The promising practices in this document show that strong Title IX compliance efforts, especially broad dissemination of information and effective education and awareness efforts, can assist educational institutions to address issues of gender in STEM. For example, effective Title IX coordination can establish collaborative partnerships between the Title IX Coordinator's office and academic departments, ensuring, among other things, appropriate training for faculty and students to raise awareness on gender issues, such as harassment and gender bias. Effective Title IX coordination may also ensure that individuals fully understand the process for addressing discrimination concerns, and how to avail themselves of it.

In addition, Title IX self-evaluation can greatly assist efforts to identify concerns regarding admission and treatment of students, and help programs to address problems in a host of specific areas, from stronger outreach and recruitment efforts, to greater transparency in program policies and practices, to program participant perceptions of the program environment.

Finally, NASA has found that the process of a Title IX review itself provides schools with an excellent opportunity to step back and assess their programs



in these respects. NASA has heard from departments reviewed that the reviews have been beneficial.

NASA will continue to conduct its Title IX compliance program as a critical part of its efforts to develop a STEM pipeline that provides equal opportunities to all program participants, regardless of gender.

## APPENDIX A

# NASA's Title IX Regulations

## CODE OF FEDERAL REGULATIONS

### TITLE 14: AERONAUTICS AND SPACE

*Part 1253—Nondiscrimination on the basis of sex in education programs or activities receiving federal financial assistance*

## SECTION CONTENTS

### Subpart A—Introduction

- Sec. 1253.100 Purpose and effective date.
- Sec. 1253.105 Definitions.
- Sec. 1253.110 Remedial and affirmative action and self-evaluation.
- Sec. 1253.115 Assurance required.
- Sec. 1253.120 Transfers of property.
- Sec. 1253.125 Effect of other requirements.
- Sec. 1253.130 Effect of employment opportunities.
- Sec. 1253.135 Designation of responsible employee and adoption of grievance procedures.
- Sec. 1253.140 Dissemination of policy.

### Subpart B—Coverage

- Sec. 1253.200 Application.
- Sec. 1253.205 Educational institutions and other entities controlled by religious organizations.
- Sec. 1253.210 Military and merchant marine educational institutions.
- Sec. 1253.215 Membership practices of certain organizations.
- Sec. 1253.220 Admissions.
- Sec. 1253.225 Educational institutions eligible to submit transition plans.
- Sec. 1253.230 Transition plans.
- Sec. 1253.235 Statutory amendments.

### Subpart C—Discrimination on the Basis of Sex in Admission and Recruitment Prohibited

- Sec. 1253.300 Admission.
- Sec. 1253.305 Preference in admission.
- Sec. 1253.310 Recruitment.

### Subpart D—Discrimination on the Basis of Sex in Education Programs or Activities Prohibited

- Sec. 1253.400 Education programs or activities.
- Sec. 1253.405 Housing.
- Sec. 1253.410 Comparable facilities.
- Sec. 1253.415 Access to course offerings.
- Sec. 1253.420 Access to schools operated by LEAs.
- Sec. 1253.425 Counseling and use of appraisal and counseling materials.
- Sec. 1253.430 Financial assistance.
- Sec. 1253.435 Employment assistance to students.
- Sec. 1253.440 Health and insurance benefits and services.
- Sec. 1253.445 Marital or parental status.
- Sec. 1253.450 Athletics.
- Sec. 1253.455 Textbooks and curricular material.

### Subpart E—Discrimination on the Basis of Sex in Employment in Education Programs or Activities Prohibited

- Sec. 1253.500 Employment.
- Sec. 1253.505 Employment criteria.
- Sec. 1253.510 Recruitment.
- Sec. 1253.515 Compensation.
- Sec. 1253.520 Job classification and structure.
- Sec. 1253.525 Fringe benefits.
- Sec. 1253.530 Marital or parental status.
- Sec. 1253.535 Effect of State or local law or other requirements.
- Sec. 1253.540 Advertising.
- Sec. 1253.545 Pre-employment inquiries.
- Sec. 1253.550 Sex as a bona fide occupational qualification.

### Subpart F—Procedures

- Sec. 1253.600 Notice of covered programs.
- Sec. 1253.605 Enforcement procedures.

Authority: 20 U.S.C. 1681, 1682, 1683, 1685, 1686, 1687, 1688.

Source: 65 F.R. 52865, 52876, Aug. 30, 2000, unless otherwise noted.

## SUBPART A

## INTRODUCTION

*SEC. 1253.100 PURPOSE AND EFFECTIVE DATE.*

The purpose of these Title IX regulations is to effectuate Title IX of the Education Amendments of 1972, as amended (except sections 904 and 906 of those Amendments) (20 U.S.C. 1681, 1682, 1683, 1685, 1686, 1687, 1688), which is designed to eliminate (with certain exceptions) discrimination on the basis of sex in any education program or activity receiving Federal financial assistance, whether or not such program or activity is offered or sponsored by an educational institution as defined in these Title IX regulations. The effective date of these Title IX regulations shall be September 29, 2000.

*SEC. 1253.105 DEFINITIONS.*

As used in these Title IX regulations, the term:

- *Administratively separate unit* means a school, department, or college of an educational institution (other than a local educational agency) admission to which is independent of admission to any other component of such institution.
- *Admission* means selection for part-time, full-time, special, associate, transfer, exchange, or any other enrollment, membership, or matriculation in or at an education program or activity operated by a recipient.
- *Applicant* means one who submits an application, request, or plan required to be approved by an official of the Federal agency that awards Federal financial assistance, or by a recipient, as a condition to becoming a recipient.
- *Designated agency official* means Associate Administrator for Equal Opportunity Programs.
- *Educational institution* means a local educational agency (LEA) as defined by 20 U.S.C. 8801(18), a preschool, a private elementary or secondary school, or an applicant or recipient that is an institution of graduate higher education, an institution of undergraduate higher education, an institution of professional education, or an institution of vocational education, as defined in this section.
- *Federal financial assistance* means any of the following, when authorized or extended under a law administered by the Federal agency that awards such assistance:
  - (1) A grant or loan of Federal financial assistance, including funds made available for:
    - (i) The acquisition, construction, renovation, restoration, or repair of a building or facility or any portion thereof, and
    - (ii) Scholarships, loans, grants, wages, or other funds extended to any entity for payment to or on behalf of students admitted to that entity, or extended directly to such students for payment to that entity.
  - (2) A grant of Federal real or personal property or any interest therein, including surplus property, and the proceeds of the sale or transfer of such property, if the Federal share of the fair market value of the property is not, upon such sale or transfer, properly accounted for to the Federal Government.
  - (3) Provision of the services of Federal personnel.
  - (4) Sale or lease of Federal property or any interest therein at nominal consideration, or at consideration reduced for the purpose of assisting the recipient or in recognition of public interest to be served thereby, or permission to use Federal property or any interest therein without consideration.
  - (5) Any other contract, agreement, or arrangement that has as one of its purposes the provision of assistance to any education program or activity, except a contract of insurance or guaranty.
- *Institution of graduate higher education* means an institution that:
  - (1) Offers academic study beyond the bachelor of arts or bachelor of science degree, whether or not leading to a certificate of any higher degree in the liberal arts and sciences

- (2) Awards any degree in a professional field beyond the first professional degree (regardless of whether the first professional degree in such field is awarded by an institution of undergraduate higher education or professional education), or
- (3) Awards no degree and offers no further academic study, but operates ordinarily for the purpose of facilitating research by persons who have received the highest graduate degree in any field of study.
- *Institution of professional education* means an institution (except any institution of undergraduate higher education) that offers a program of academic study that leads to a first professional degree in a field for which there is a national specialized accrediting agency recognized by the Secretary of Education.
  - *Institution of undergraduate higher education* means:
    - (1) An institution offering at least two but less than four years of college-level study beyond the high school level, leading to a diploma or an associate degree, or wholly or principally creditable toward a baccalaureate degree
    - (2) An institution offering academic study leading to a baccalaureate degree, or
    - (3) An agency or body that certifies credentials or offers degrees, but that may or may not offer academic study.
  - *Institution of vocational education* means a school or institution (except an institution of professional or graduate or undergraduate higher education) that has as its primary purpose preparation of students to pursue a technical, skilled, or semi-skilled occupation or trade, or to pursue study in a technical field, whether or not the school or institution offers certificates, diplomas, or degrees and whether or not it offers full-time study.
  - *Recipient* means any State or political subdivision thereof, or any instrumentality of a State or political subdivision thereof, any public or private agency, institution, or organization, or other entity, or any person, to whom Federal financial assistance is extended directly or through another recipient and that operates an education program or activity that receives such assistance, including any subunit, successor, assignee, or transferee thereof.
  - *Student* means a person who has gained admission.
  - *Title IX* means Title IX of the Education Amendments of 1972, Public Law 92–318, 86 Stat. 235, 373 (codified as amended at 20 U.S.C. 1681–1688) (except sections 904 and 906 thereof), as amended by section 3 of Public Law 93–568, 88 Stat. 1855, by section 412 of the Education Amendments of 1976, Public Law 94–482, 90 Stat. 2234, and by Section 3 of Public Law 100–259, 102 Stat. 28, 28–29 (20 U.S.C. 1681, 1682, 1683, 1685, 1686, 1687, 1688).
  - *Title IX regulations* means the provisions set forth at Sec. Sec. 1253.100 through 1253.605.
  - *Transition plan* means a plan subject to the approval of the Secretary of Education pursuant to Section 901(a)(2) of the Education Amendments of 1972, 20 U.S.C. 1681(a)(2), under which an educational institution operates in making the transition from being an educational institution that admits only students of one sex to being one that admits students of both sexes without discrimination.
- SEC. 1253.110 REMEDIAL AND AFFIRMATIVE ACTION AND SELF-EVALUATION.**
- (a) *Remedial action.* If the designated agency official finds that a recipient has discriminated against persons on the basis of sex in an education program or activity, such recipient shall take such remedial action as the designated agency official deems necessary to overcome the effects of such discrimination.
- (b) *Affirmative action.* In the absence of a finding of discrimination on the basis of sex in an education

program or activity, a recipient may take affirmative action consistent with law to overcome the effects of conditions that resulted in limited participation therein by persons of a particular sex. Nothing in these Title IX regulations shall be interpreted to alter any affirmative action obligations that a recipient may have under Executive Order 11246, 3 C.F.R., 1964–1965 Comp., p. 339; as amended by Executive Order 11375, 3 C.F.R., 1966–1970 Comp., p. 684; as amended by Executive Order 11478, 3 C.F.R., 1966–1970 Comp., p. 803; as amended by Executive Order 12086, 3 C.F.R., 1978 Comp., p. 230; as amended by Executive Order 12107, 3 C.F.R., 1978 Comp., p. 264.

(c) *Self-evaluation.* Each recipient education institution shall, within one year of September 29, 2000:

- (1) Evaluate, in terms of the requirements of these Title IX regulations, its current policies and practices and the effects thereof concerning admission of students, treatment of students, and employment of both academic and nonacademic personnel working in connection with the recipient's education program or activity
- (2) Modify any of these policies and practices that do not or may not meet the requirements of these Title IX regulations, and
- (3) Take appropriate remedial steps to eliminate the effects of any discrimination that resulted or may have resulted from adherence to these policies and practices.

(d) *Availability of self-evaluation and related materials.* Recipients shall maintain on file for at least three years following completion of the evaluation required under paragraph (c) of this section, and shall provide to the designated agency official upon request, a description of any modifications made pursuant to paragraph (c)(2) of this section and of any remedial steps taken pursuant to paragraph (c)(3) of this section.

#### *SEC. 1253.115 ASSURANCE REQUIRED.*

(a) *General.* Either at the application stage or the award stage, Federal agencies must ensure that applications for Federal financial assistance or awards of Federal financial assistance contain, be accompanied by, or be covered by a specifically identified assurance from the applicant or recipient, satisfactory to the designated agency official, that each education program or activity operated by the applicant or recipient, and to which these Title IX regulations apply, will be operated in compliance with these Title IX regulations. An assurance of compliance with these Title IX regulations shall not be satisfactory to the designated agency official if the applicant or recipient to whom such assurance applies fails to commit itself to take whatever remedial action is necessary in accordance with Sec. 1253.110(a) to eliminate existing discrimination on the basis of sex or to eliminate the effects of past discrimination whether occurring prior to or subsequent to the submission to the designated agency official of such assurance.

(b) *Duration of obligation.*

- (1) In the case of Federal financial assistance extended to provide real property or structures thereon, such assurance shall obligate the recipient or, in the case of a subsequent transfer, the transferee, for the period during which the real property or structures are used to provide an education program or activity.
- (2) In the case of Federal financial assistance extended to provide personal property, such assurance shall obligate the recipient for the period during which it retains ownership or possession of the property.
- (3) In all other cases such assurance shall obligate the recipient for the period during which Federal financial assistance is extended.

(c) *Form.* (1) The assurances required by paragraph (a) of this section, which may be included as part of a document that addresses other assurances or obligations, shall include that the applicant or recipient will comply with all applicable Federal statutes relating to nondiscrimination. These include but are not limited to: Title IX of the Education Amendments of 1972, as amended (20 U.S.C. 1681–1683, 1685–1688).

(2) The designated agency official will specify the extent to which such assurances will be required of the applicant's or recipient's subgrantees, contractors, subcontractors, transferees, or successors in interest.

#### **SEC. 1253.120 TRANSFERS OF PROPERTY.**

If a recipient sells or otherwise transfers property financed in whole or in part with Federal financial assistance to a transferee that operates any education program or activity, and the Federal share of the fair market value of the property is not upon such sale or transfer properly accounted for to the Federal Government, both the transferor and the transferee shall be deemed to be recipients, subject to the provisions of Sec. Sec. 1253.205 through 1253.235(a).

#### **SEC. 1253.125 EFFECT OF OTHER REQUIREMENTS.**

(a) *Effect of other Federal provisions.* The obligations imposed by these Title IX regulations are independent of, and do not alter, obligations not to discriminate on the basis of sex imposed by Executive Order 11246, 3 C.F.R., 1964–1965 Comp., p. 339; as amended by Executive Order 11375, 3 C.F.R., 1966–1970 Comp., p. 684; as amended by Executive Order 11478, 3 C.F.R., 1966–1970 Comp., p. 803; as amended by Executive Order 12087, 3 C.F.R., 1978 Comp., p. 230; as amended by Executive Order 12107, 3 C.F.R., 1978 Comp., p. 264; sections 704 and 855 of the Public Health Service Act (42 U.S.C.

295m, 298b-2); Title VII of the Civil Rights Act of 1964 (42 U.S.C. 2000e et seq. ); the Equal Pay Act of 1963 (29 U.S.C. 206); and any other Act of Congress or Federal regulation.

(b) *Effect of State or local law or other requirements.* The obligation to comply with these Title IX regulations is not obviated or alleviated by any State or local law or other requirement that would render any applicant or student ineligible, or limit the eligibility of any applicant or student, on the basis of sex, to practice any occupation or profession.

(c) *Effect of rules or regulations of private organizations.* The obligation to comply with these Title IX regulations is not obviated or alleviated by any rule or regulation of any organization, club, athletic or other league, or association that would render any applicant or student ineligible to participate or limit the eligibility or participation of any applicant or student, on the basis of sex, in any education program or activity operated by a recipient and that receives Federal financial assistance.

#### **SEC. 1253.130 EFFECT OF EMPLOYMENT OPPORTUNITIES.**

The obligation to comply with these Title IX regulations is not obviated or alleviated because employment opportunities in any occupation or profession are or may be more limited for members of one sex than for members of the other sex.

#### **SEC. 1253.135 DESIGNATION OF RESPONSIBLE EMPLOYEE AND ADOPTION OF GRIEVANCE PROCEDURES.**

(a) *Designation of responsible employee.* Each recipient shall designate at least one employee to coordinate its efforts to comply with and carry out its responsibilities under these Title IX regulations, including any investigation of any complaint communicated to such recipient alleging its noncompliance with these Title IX regulations or alleging any actions that would be prohibited by these Title IX regulations. The recipient

shall notify all its students and employees of the name, office address, and telephone number of the employee or employees appointed pursuant to this paragraph.

(b) *Complaint procedure of recipient.* A recipient shall adopt and publish grievance procedures providing for prompt and equitable resolution of student and employee complaints alleging any action that would be prohibited by these Title IX regulations.

**SEC. 1253.140 DISSEMINATION OF POLICY.**

(a) *Notification of policy.*

(1) Each recipient shall implement specific and continuing steps to notify applicants for admission and employment, students and parents of elementary and secondary school students, employees, sources of referral of applicants for admission and employment, and all unions or professional organizations holding collective bargaining or professional agreements with the recipient, that it does not discriminate on the basis of sex in the educational programs or activities that it operates, and that it is required by Title IX and these Title IX regulations not to discriminate in such a manner. Such notification shall contain such information, and be made in such manner, as the designated agency official finds necessary to apprise such persons of the protections against discrimination assured them by Title IX and these Title IX regulations, but shall state at least that the requirement not to discriminate in education programs or activities extends to employment therein, and to admission thereto unless Sec. Sec. 1253.300 through 1253.310 do not apply to the recipient, and that inquiries concerning the application of Title IX and these Title IX regulations to such recipient may be referred to the employee designated

pursuant to Sec. 1253.135, or to the designated agency official.

(2) Each recipient shall make the initial notification required by paragraph (a)(1) of this section within 90 days of September 29, 2000 or of the date these Title IX regulations first apply to such recipient, whichever comes later, which notification shall include publication in:

- (i) Newspapers and magazines operated by such recipient or by student, alumnae, or alumni groups for or in connection with such recipient, and
- (ii) Memoranda or other written communications distributed to every student and employee of such recipient.

(b) *Publications.*

(1) Each recipient shall prominently include a statement of the policy described in paragraph (a) of this section in each announcement, bulletin, catalog, or application form that it makes available to any person of a type, described in paragraph (a) of this section, or which is otherwise used in connection with the recruitment of students or employees.

(2) A recipient shall not use or distribute a publication of the type described in paragraph (b)(1) of this section that suggests, by text or illustration, that such recipient treats applicants, students, or employees differently on the basis of sex except as such treatment is permitted by these Title IX regulations.

(c) *Distribution.* Each recipient shall distribute without discrimination on the basis of sex each publication described in paragraph (b)(1) of this section, and shall apprise each of its admission and employment recruitment representatives of the policy of nondiscrimination described in paragraph (a) of this section, and shall require such representatives to adhere to such policy.

## SUBPART B

## COVERAGE

*SEC. 1253.200 APPLICATION.*

Except as provided in Sec.Sec. 1253.205 through 1253.235(a), these Title IX regulations apply to every recipient and to each education program or activity operated by such recipient that receives Federal financial assistance.

*SEC. 1253.205 EDUCATIONAL INSTITUTIONS AND OTHER ENTITIES CONTROLLED BY RELIGIOUS ORGANIZATIONS.*

(a) *Exemption.* These Title IX regulations do not apply to any operation of an educational institution or other entity that is controlled by a religious organization to the extent that application of these Title IX regulations would not be consistent with the religious tenets of such organization.

(b) *Exemption claims.* An educational institution or other entity that wishes to claim the exemption set forth in paragraph (a) of this section shall do so by submitting in writing to the designated agency official a statement by the highest-ranking official of the institution, identifying the provisions of these Title IX regulations that conflict with a specific tenet of the religious organization.

*SEC. 1253.210 MILITARY AND MERCHANT MARINE EDUCATIONAL INSTITUTIONS.*

These Title IX regulations do not apply to an educational institution whose primary purpose is the training of individuals for a military service of the United States or for the merchant marine.

*SEC. 1253.215 MEMBERSHIP PRACTICES OF CERTAIN ORGANIZATIONS.*

(a) *Social fraternities and sororities.* These Title IX regulations do not apply to the membership practices of social fraternities and sororities that are exempt from taxation under section 501(a) of the Internal Revenue Code of 1954, 26 U.S.C. 501(a), the active membership of which consists

primarily of students in attendance at institutions of higher education.

(b) *YMCA, YWCA, Girl Scouts, Boy Scouts, and Camp Fire Girls.* These Title IX regulations do not apply to the membership practices of the Young Men's Christian Association (YMCA), the Young Women's Christian Association (YWCA), the Girl Scouts, the Boy Scouts, and Camp Fire Girls.

(c) *Voluntary youth service organizations.* These Title IX regulations do not apply to the membership practices of a voluntary youth service organization that is exempt from taxation under section 501(a) of the Internal Revenue Code of 1954, 26 U.S.C. 501(a), and the membership of which has been traditionally limited to members of one sex and principally to persons of less than 19 years of age.

*SEC. 1253.220 ADMISSIONS.*

(a) Admissions to educational institutions prior to June 24, 1973, are not covered by these Title IX regulations.

(b) *Administratively separate units.* For the purposes only of this section, Sec.Sec. 1253.225 and 1253.230, and Sec.Sec.1253.300 through 1253.310, each administratively separate unit shall be deemed to be an educational institution.

(c) *Application of Sec.Sec. 1253.300 through 1253.310.* Except as provided in paragraphs (d) and (e) of this section, Sec.Sec. 1253.300 through 1253.310 apply to each recipient. A recipient to which Sec.Sec. 1253.300 through 1253.310 apply shall not discriminate on the basis of sex in admission or recruitment in violation of Sec.Sec. 1253.300 through 1253.310.

(d) *Educational institutions.* Except as provided in paragraph (e) of this section as to recipients that are educational institutions, Sec.Sec. 1253.300 through 1253.310 apply only to institutions of

vocational education, professional education, graduate higher education, and public institutions of undergraduate higher education.

(e) *Public institutions of undergraduate higher education.* Sec.Sec. 1253.300 through 1253.310 do not apply to any public institution of undergraduate higher education that traditionally and continually from its establishment has had a policy of admitting students of only one sex.

#### SEC. 1253.225 EDUCATIONAL INSTITUTIONS ELIGIBLE TO SUBMIT TRANSITION PLANS.

(a) *Application.* This section applies to each educational institution to which Sec.Sec. 1253.300 through 1253.310 apply that:

- (1) Admitted students of only one sex as regular students as of June 23, 1972, or
- (2) Admitted students of only one sex as regular students as of June 23, 1965, but thereafter admitted, as regular students, students of the sex not admitted prior to June 23, 1965.

(b) *Provision for transition plans.* An educational institution to which this section applies shall not discriminate on the basis of sex in admission or recruitment in violation of Sec.Sec. 1253.300 through 1253.310.

#### SEC. 1253.230 TRANSITION PLANS.

(a) *Submission of plans.* An institution to which Sec. 1253.225 applies and that is composed of more than one administratively separate unit may submit either a single transition plan applicable to all such units or a separate transition plan applicable to each such unit.

(b) *Content of plans.* In order to be approved by the Secretary of Education, a transition plan shall:

- (1) State the name, address, and Federal Interagency Committee on Education Code of the educational institution submitting

such plan, the administratively separate units to which the plan is applicable, and the name, address, and telephone number of the person to whom questions concerning the plan may be addressed. The person who submits the plan shall be the Chief Administrator or President of the institution or another individual legally authorized to bind the institution to all actions set forth in the plan.

(2) State whether the educational institution or administratively separate unit admits students of both sexes as regular students and, if so, when it began to do so.

(3) Identify and describe with respect to the educational institution or administratively separate unit any obstacles to admitting students without discrimination on the basis of sex.

(4) Describe in detail the steps necessary to eliminate as soon as practicable each obstacle so identified and indicate the schedule for taking these steps and the individual directly responsible for their implementation.

(5) Include estimates of the number of students, by sex, expected to apply for, be admitted to, and enter each class during the period covered by the plan.

(c) *Nondiscrimination.* No policy or practice of a recipient to which Sec. 1253.225 applies shall result in treatment of applicants to or students of such recipient in violation of Sec.Sec. 1253.300 through 1253.310 unless such treatment is necessitated by an obstacle identified in paragraph (b) (3) of this section and a schedule for eliminating that obstacle has been provided as required by paragraph (b)(4) of this section.

(d) *Effects of past exclusion.* To overcome the effects of past exclusion of students on the basis of sex, each educational institution to which Sec. 1253.225

applies shall include in its transition plan, and shall implement, specific steps designed to encourage individuals of the previously excluded sex to apply for admission to such institution. Such steps shall include instituting recruitment programs that emphasize the institution's commitment to enrolling students of the sex previously excluded.

**SEC. 1253.235 STATUTORY AMENDMENTS.**

(a) This section, which applies to all provisions of these Title IX regulations, addresses statutory amendments to Title IX.

(b) These Title IX regulations shall not apply to or preclude:

(1) Any program or activity of the American Legion undertaken in connection with the organization or operation of any Boys State conference, Boys Nation conference, Girls State conference, or Girls Nation conference.

(2) Any program or activity of a secondary school or educational institution specifically for:

(i) The promotion of any Boys State conference, Boys Nation conference, Girls State conference, or Girls Nation conference, or

(ii) The selection of students to attend any such conference.

(3) Father-son or mother-daughter activities at an educational institution or in an education program or activity, but if such activities are provided for students of one sex, opportunities for reasonably comparable activities shall be provided to students of the other sex.

(4) Any scholarship or other financial assistance awarded by an institution of higher education to an individual because such individual has received such award in a single-sex pageant based upon a combination of factors

related to the individual's personal appearance, poise, and talent. The pageant, however, must comply with other nondiscrimination provisions of Federal law.

(c) *Program or activity or program* means:

(1) All of the operations of any entity described in paragraphs (c)(1)(i) through (iv) of this section, any part of which is extended Federal financial assistance:

(i)(A) A department, agency, special purpose district, or other instrumentality of a State or of a local government, or

(B) The entity of such State or local government that distributes such assistance and each such department or agency (and each other State or local government entity) to which the assistance is extended, in the case of assistance to a State or local government.

(ii)(A) A college, university, or other post-secondary institution, or a public system of higher education, or

(B) A local educational agency (as defined in section 8801 of title 20), system of vocational education, or other school system.

(iii)(A) An entire corporation, partnership, or other private organization, or an entire sole proprietorship.

(1) If assistance is extended to such corporation, partnership, private organization, or sole proprietorship as a whole, or

(2) Which is principally engaged in the business of providing education, health care, housing, social services, or parks and recreation, or

(B) The entire plant or other comparable, geographically separate facility to which Federal financial assistance is extended, in the case of any other corporation,

partnership, private organization, or sole proprietorship, or

(iv) Any other entity that is established by two or more of the entities described in paragraphs (c)(1)(i), (ii), or (iii) of this section.

(2)(i) *Program or activity* does not include any operation of an entity that is controlled by a religious organization if the application of 20 U.S.C. 1681 to such operation would not be consistent with the religious tenets of such organization.

(ii) For example, all of the operations of a college, university, or other postsecondary institution, including but not limited to traditional educational operations, faculty and student housing, campus shuttle bus service, campus restaurants, the bookstore, and other commercial activities are part of a “program or activity” subject to these Title IX regulations if the college, university, or other institution receives Federal financial assistance.

(d)(1) Nothing in these Title IX regulations shall be construed to require or

prohibit any person, or public or private entity, to provide or pay for any benefit or service, including the use of facilities, related to an abortion. Medical procedures, benefits, services, and the use of facilities, necessary to save the life of a pregnant woman or to address complications related to an abortion are not subject to this section.

(2) Nothing in this section shall be construed to permit a penalty to be imposed on any person or individual because such person or individual is seeking or has received any benefit or service related to a legal abortion. Accordingly, subject to paragraph (d)(1) of this section, no person shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any academic, extracurricular, research, occupational training, employment, or other educational program or activity operated by a recipient that receives Federal financial assistance because such individual has sought or received, or is seeking, a legal abortion, or any benefit or service related to a legal abortion.

## SUBPART C

# DISCRIMINATION ON THE BASIS OF SEX IN ADMISSION AND RECRUITMENT PROHIBITED

## SEC. 1253.300 ADMISSION.

(a) *General.* No person shall, on the basis of sex, be denied admission, or be subjected to discrimination in admission, by any recipient to which Sec.Sec. 1253.300 through Sec.Sec. 1253.310 apply, except as provided in Sec.Sec. 1253.225 and Sec.Sec. 1253.230.

(b) *Specific prohibitions.*

(1) In determining whether a person satisfies any policy or criterion for admission, or in making any offer of admission, a recipient to which Sec.Sec. 1253.300 through 1253.310 apply shall not:

- (i) Give preference to one person over another on the basis of sex, by ranking applicants separately on such basis, or otherwise
- (ii) Apply numerical limitations upon the number or proportion of persons of either sex who may be admitted, or
- (iii) Otherwise treat one individual differently from another on the basis of sex.

(2) A recipient shall not administer or operate any test or other criterion for admission that has a disproportionately adverse effect on persons on the basis of sex unless the use of such test or criterion is shown to predict validly success in the education program or activity in question and alternative tests or criteria that do not have such a disproportionately adverse effect are shown to be unavailable.

(c) *Prohibitions relating to marital or parental status.* In determining whether a person satisfies any policy or criterion for admission, or in making any offer of admission, a recipient to which Sec.Sec. 1253.300 through 1253.310 apply:

(1) Shall not apply any rule concerning the actual or potential parental, family, or marital

status of a student or applicant that treats persons differently on the basis of sex

(2) Shall not discriminate against or exclude any person on the basis of pregnancy, childbirth, termination of pregnancy, or recovery therefrom, or establish or follow any rule or practice that so discriminates or excludes

(3) Subject to Sec. 1253.235(d), shall treat disabilities related to pregnancy, childbirth, termination of pregnancy, or recovery therefrom in the same manner and under the same policies as any other temporary disability or physical condition, and

(4) Shall not make pre-admission inquiry as to the marital status of an applicant for admission, including whether such applicant is “Miss” or “Mrs.” A recipient may make pre-admission inquiry as to the sex of an applicant for admission, but only if such inquiry is made equally of such applicants of both sexes and if the results of such inquiry are not used in connection with discrimination prohibited by these Title IX regulations.

## SEC. 1253.305 PREFERENCE IN ADMISSION.

A recipient to which Sec.Sec. 1253.300 through 1253.310 apply shall not give preference to applicants for admission, on the basis of attendance at any educational institution or other school or entity that admits as students only or predominantly members of one sex, if the giving of such preference has the effect of discriminating on the basis of sex in violation of Sec. Sec. 1253.300 through 1253.310.

## SEC. 1253.310 RECRUITMENT.

(a) *Nondiscriminatory recruitment.* A recipient to which Sec.Sec. 1253.300 through 1253.310 apply shall not discriminate on the basis of sex in the recruitment and admission of students. A recipient

may be required to undertake additional recruitment efforts for one sex as remedial action pursuant to Sec. 1253.110(a), and may choose to undertake such efforts as affirmative action pursuant to Sec. 1253.110(b).

(b) *Recruitment at certain institutions.* A recipient to which Sec. Sec. 1253.300 through

1253.310 apply shall not recruit primarily or exclusively at educational institutions, schools, or entities that admit as students only or predominantly members of one sex, if such actions have the effect of discriminating on the basis of sex in violation of Sec. Sec. 1253.300 through 1253.310.

## SUBPART D

# DISCRIMINATION ON THE BASIS OF SEX IN EDUCATION PROGRAMS OR ACTIVITIES PROHIBITED

## SEC. 1253.400 EDUCATION PROGRAMS OR ACTIVITIES.

(a) *General.* Except as provided elsewhere in these Title IX regulations, no person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any academic, extracurricular, research, occupational training, or other education program or activity operated by a recipient that receives Federal financial assistance. Sections 1253.400 through 1253.455 do not apply to actions of a recipient in connection with admission of its students to an education program or activity of a recipient to which Sec. Sec. 1253.300 through 1253.310 do not apply, or an entity, not a recipient, to which Sec. Sec. 1253.300 through 1253.310 would not apply if the entity were a recipient.

(b) *Specific prohibitions.* Except as provided in Sec. Sec. 1253.400 through 1253.455, in providing any aid, benefit, or service to a student, a recipient shall not, on the basis of sex:

- (1) Treat one person differently from another in determining whether such person satisfies any requirement or condition for the provision of such aid, benefit, or service
- (2) Provide different aid, benefits, or services or provide aid, benefits, or services in a different manner
- (3) Deny any person any such aid, benefit, or service
- (4) Subject any person to separate or different rules of behavior, sanctions, or other treatment
- (5) Apply any rule concerning the domicile or residence of a student or applicant, including eligibility for in-State fees and tuition
- (6) Aid or perpetuate discrimination against any person by providing significant assistance to any agency, organization, or person that discriminates on the basis of sex in providing

any aid, benefit, or service to students or employees

(7) Otherwise limit any person in the enjoyment of any right, privilege, advantage, or opportunity.

(c) *Assistance administered by a recipient educational institution to study at a foreign institution.* A recipient educational institution may administer or assist in the administration of scholarships, fellowships, or other awards established by foreign or domestic wills, trusts, or similar legal instruments, or by acts of foreign governments and restricted to members of one sex, that are designed to provide opportunities to study abroad, and that are awarded to students who are already matriculating at or who are graduates of the recipient institution; Provided, that a recipient educational institution that administers or assists in the administration of such scholarships, fellowships, or other awards that are restricted to members of one sex provides, or otherwise makes available, reasonable opportunities for similar studies for members of the other sex. Such opportunities may be derived from either domestic or foreign sources.

(d) *Aids, benefits or services not provided by recipient.*

(1) This paragraph (d) applies to any recipient that requires participation by any applicant, student, or employee in any education program or activity not operated wholly by such recipient, or that facilitates, permits, or considers such participation as part of or equivalent to an education program or activity operated by such recipient, including participation in educational consortia and cooperative employment and student-teaching assignments.

(2) Such recipient:

- (i) Shall develop and implement a procedure designed to assure itself that the

operator or sponsor of such other education program or activity takes no action affecting any applicant, student, or employee of such recipient that these Title IX regulations would prohibit such recipient from taking, and

(ii) Shall not facilitate, require, permit, or consider such participation if such action occurs.

**SEC. 1253.405 HOUSING.**

(a) *Generally.* A recipient shall not, on the basis of sex, apply different rules or regulations, impose different fees or requirements, or offer different services or benefits related to housing, except as provided in this section (including housing provided only to married students).

(b) *Housing provided by recipient.*

(1) A recipient may provide separate housing on the basis of sex.

(2) Housing provided by a recipient to students of one sex, when compared to that provided to students of the other sex, shall be as a whole:

(i) Proportionate in quantity to the number of students of that sex applying for such housing, and

(ii) Comparable in quality and cost to the student.

(c) *Other housing.*

(1) A recipient shall not, on the basis of sex, administer different policies or practices concerning occupancy by its students of housing other than that provided by such recipient.

(2)(i) A recipient which, through solicitation, listing, approval of housing, or otherwise, assists any agency, organization, or person in making housing available to any of its students, shall take such reasonable action

as may be necessary to assure itself that such housing as is provided to students of one sex, when compared to that provided to students of the other sex, is as a whole:

(A) Proportionate in quantity, and

(B) Comparable in quality and cost to the student.

(ii) A recipient may render such assistance to any agency, organization, or person that provides all or part of such housing to students of only one sex.

**SEC. 1253.410 COMPARABLE FACILITIES.**

A recipient may provide separate toilet, locker room, and shower facilities on the basis of sex, but such facilities provided for students of one sex shall be comparable to such facilities provided for students of the other sex.

**SEC. 1253.415 ACCESS TO COURSE OFFERINGS.**

(a) A recipient shall not provide any course or otherwise carry out any of its education program or activity separately on the basis of sex, or require or refuse participation therein by any of its students on such basis, including health, physical education, industrial, business, vocational, technical, home economics, music, and adult education courses.

(b) (1) With respect to classes and activities in physical education at the elementary school level, the recipient shall comply fully with this section as expeditiously as possible but in no event later than one year from September 29, 2000. With respect to physical education classes and activities at the secondary and post-secondary levels, the recipient shall comply fully with this section as expeditiously as possible but in no event later than three years from September 29, 2000.

(2) This section does not prohibit grouping of students in physical education classes and activities by ability as assessed by objective standards of individual performance developed and applied without regard to sex.

(3) This section does not prohibit separation of students by sex within physical education classes or activities during participation in wrestling, boxing, rugby, ice hockey, football, basketball, and other sports the purpose or major activity of which involves bodily contact.

(4) Where use of a single standard of measuring skill or progress in a physical education class has an adverse effect on members of one sex, the recipient shall use appropriate standards that do not have such effect.

(5) Portions of classes in elementary and secondary schools, or portions of education programs or activities, that deal exclusively with human sexuality may be conducted in separate sessions for boys and girls.

(6) Recipients may make requirements based on vocal range or quality that may result in a chorus or choruses of one or predominantly one sex.

#### *SEC. 1253.420 ACCESS TO SCHOOLS OPERATED BY LEAS.*

A recipient that is an ILEA shall not, on the basis of sex, exclude any person from admission to:

(a) Any institution of vocational education operated by such recipient, or

(b) Any other school or educational unit operated by such recipient, unless such recipient otherwise makes available to such person, pursuant to the same policies and criteria of admission, courses, services, and facilities comparable to each course, service, and facility offered in or through such schools.

#### *SEC. 1253.425 COUNSELING AND USE OF APPRAISAL AND COUNSELING MATERIALS.*

(a) *Counseling.* A recipient shall not discriminate against any person on the basis of sex in the counseling or guidance of students or applicants for admission.

(b) *Use of appraisal and counseling materials.* A recipient that uses testing or other materials for appraising or counseling students shall not use different materials for students on the basis of their sex or use materials that permit or require different treatment of students on such basis unless such different materials cover the same occupations and interest areas and the use of such different materials is shown to be essential to eliminate sex bias. Recipients shall develop and use internal procedures for ensuring that such materials do not discriminate on the basis of sex. Where the use of a counseling test or other instrument results in a substantially disproportionate number of members of one sex in any particular course of study or classification, the recipient shall take such action as is necessary to assure itself that such disproportion is not the result of discrimination in the instrument or its application.

(c) *Disproportion in classes.* Where a recipient finds that a particular class contains a substantially disproportionate number of individuals of one sex, the recipient shall take such action as is necessary to assure itself that such disproportion is not the result of discrimination on the basis of sex in counseling or appraisal materials or by counselors.

#### *SEC. 1253.430 FINANCIAL ASSISTANCE.*

(a) *General.* Except as provided in paragraphs (b) and (c) of this section, in providing financial assistance to any of its students, a recipient shall not:

(1) On the basis of sex, provide different amounts or types of such assistance, limit eligibility for such assistance that is of any particular type or source, apply different criteria, or otherwise discriminate

(2) Through solicitation, listing, approval, provision of facilities, or other services, assist any foundation, trust, agency, organization, or person that provides assistance to any of such recipient's students in a manner that discriminates on the basis of sex, or

(3) Apply any rule or assist in application of any rule concerning eligibility for such assistance that treats persons of one sex differently from persons of the other sex with regard to marital or parental status.

(b) *Financial aid established by certain legal instruments.*

(1) A recipient may administer or assist in the administration of scholarships, fellowships, or other forms of financial assistance established pursuant to domestic or foreign wills, trusts, bequests, or similar legal instruments or by acts of a foreign government that require that awards be made to members of a particular sex specified therein; Provided, that the overall effect of the award of such sex-restricted scholarships, fellowships, and other forms of financial assistance does not discriminate on the basis of sex.

(2) To ensure nondiscriminatory awards of assistance as required in paragraph (b)(1) of this section, recipients shall develop and use procedures under which:

(i) Students are selected for award of financial assistance on the basis of nondiscriminatory criteria and not on the basis of availability of funds restricted to members of a particular sex

(ii) An appropriate sex-restricted scholarship, fellowship, or other form of financial assistance is allocated to each student selected under paragraph (b)(2)(i) of this section, and

(iii) No student is denied the award for which he or she was selected under paragraph (b)(2)(i) of this section because of the absence of a scholarship, fellowship, or other form of financial assistance designated for a member of that student's sex.

(c) *Athletic scholarships.*

(1) To the extent that a recipient awards athletic scholarships or grants-in-aid, it must provide reasonable opportunities for such awards for members of each sex in proportion to the number of students of each sex participating in interscholastic or intercollegiate athletics.

(2) A recipient may provide separate athletic scholarships or grants-in-aid for members of each sex as part of separate athletic teams for members of each sex to the extent consistent with this paragraph (c) and Sec. 1253.450.

**SEC. 1253.435 EMPLOYMENT ASSISTANCE TO STUDENTS.**

(a) *Assistance by recipient in making available outside employment.* A recipient that assists any agency, organization, or person in making employment available to any of its students:

(1) Shall assure itself that such employment is made available without discrimination on the basis of sex, and

(2) Shall not render such services to any agency, organization, or person that discriminates on the basis of sex in its employment practices.

(b) *Employment of students by recipients.* A recipient that employs any of its students shall not do so in a manner that violates Sec. Sec. 1253.500 through 1253.550.

*SEC. 1253.440 HEALTH AND INSURANCE BENEFITS AND SERVICES.*

Subject to Sec. 1253.235(d), in providing a medical, hospital, accident, or life insurance benefit, service, policy, or plan to any of its students, a recipient shall not discriminate on the basis of sex, or provide such benefit, service, policy, or plan in a manner that would violate Sec. 1253.500 through 1253.550 if it were provided to employees of the recipient. This section shall not prohibit a recipient from providing any benefit or service that may be used by a different proportion of students of one sex than of the other, including family planning services. However, any recipient that provides full coverage health service shall provide gynecological care.

*SEC. 1253.445 MARITAL OR PARENTAL STATUS.*

(a) *Status generally.* A recipient shall not apply any rule concerning a student's actual or potential parental, family, or marital status that treats students differently on the basis of sex.

(b) *Pregnancy and related conditions.* (1) A recipient shall not discriminate against any student, or exclude any student from its education program or activity, including any class or extracurricular activity, on the basis of such student's pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery therefrom, unless the student requests voluntarily to participate in a separate portion of the program or activity of the recipient.

(2) A recipient may require such a student to obtain the certification of a physician that the student is physically and emotionally able to continue participation as long as such a certification is required of all students for other physical or emotional conditions requiring the attention of a physician.

(3) A recipient that operates a portion of its education program or activity separately for

pregnant students, admittance to which is completely voluntary on the part of the student as provided in paragraph (b)(1) of this section, shall ensure that the separate portion is comparable to that offered to non-pregnant students.

(4) Subject to Sec. 1253.235(d), a recipient shall treat pregnancy, childbirth, false pregnancy, termination of pregnancy and recovery therefrom in the same manner and under the same policies as any other temporary disability with respect to any medical or hospital benefit, service, plan, or policy that such recipient administers, operates, offers, or participates in with respect to students admitted to the recipient's educational program or activity.

(5) In the case of a recipient that does not maintain a leave policy for its students, or in the case of a student who does not otherwise qualify for leave under such a policy, a recipient shall treat pregnancy, childbirth, false pregnancy, termination of pregnancy, and recovery therefrom as a justification for a leave of absence for as long a period of time as is deemed medically necessary by the student's physician, at the conclusion of which the student shall be reinstated to the status that she held when the leave began.

*SEC. 1253.450 ATHLETICS.*

(a) *General.* No person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, be treated differently from another person, or otherwise be discriminated against in any interscholastic, intercollegiate, club, or intramural athletics offered by a recipient, and no recipient shall provide any such athletics separately on such basis.

(b) *Separate teams.* Notwithstanding the requirements of paragraph (a) of this section, a recipient may operate or sponsor separate teams for members of each sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport. However, where a recipient operates or sponsors a team in a particular sport for members of one sex but operates or sponsors no such team for members of the other sex, and athletic opportunities for members of that sex have previously been limited, members of the excluded sex must be allowed to try out for the team offered unless the sport involved is a contact sport. For the purposes of these Title IX regulations, contact sports include boxing, wrestling, rugby, ice hockey, football, basketball, and other sports the purpose or major activity of which involves bodily contact.

(c) *Equal opportunity.*

(1) A recipient that operates or sponsors interscholastic, intercollegiate, club, or intramural athletics shall provide equal athletic opportunity for members of both sexes. In determining whether equal opportunities are available, the designated agency official will consider, among other factors:

- (i) Whether the selection of sports and levels of competition effectively accommodate the interests and abilities of members of both sexes
- (ii) The provision of equipment and supplies
- (iii) Scheduling of games and practice time
- (iv) Travel and per diem allowance
- (v) Opportunity to receive coaching and academic tutoring

(vi) Assignment and compensation of coaches and tutors

(vii) Provision of locker rooms, practice, and competitive facilities

(viii) Provision of medical and training facilities and services

(ix) Provision of housing and dining facilities and services

(x) *Publicity.*

(2) For purposes of paragraph (c)(1) of this section, unequal aggregate expenditures for members of each sex or unequal expenditures for male and female teams if a recipient operates or sponsors separate teams will not constitute noncompliance with this section, but the designated agency official may consider the failure to provide necessary funds for teams for one sex in assessing equality of opportunity for members of each sex.

(d) *Adjustment period.* A recipient that operates or sponsors interscholastic, intercollegiate, club, or intramural athletics at the elementary school level shall comply fully with this section as expeditiously as possible but in no event later than one year from September 29, 2000. A recipient that operates or sponsors interscholastic, intercollegiate, club, or intramural athletics at the secondary or postsecondary school level shall comply fully with this section as expeditiously as possible but in no event later than three years from September 29, 2000.

**SEC. 1253.455 TEXTBOOKS AND CURRICULAR MATERIAL.**

Nothing in these Title IX regulations shall be interpreted as requiring or prohibiting or abridging in any way the use of particular textbooks or curricular materials.

## SUBPART E

# DISCRIMINATION ON THE BASIS OF SEX IN EMPLOYMENT IN EDUCATION PROGRAMS OR ACTIVITIES PROHIBITED

## SEC. 1253.500 EMPLOYMENT.

### (a) *General.*

(1) No person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination in employment, or recruitment, consideration, or selection therefore, whether full-time or part-time, under any education program or activity operated by a recipient that receives Federal financial assistance.

(2) A recipient shall make all employment decisions in any education program or activity operated by such recipient in a nondiscriminatory manner and shall not limit, segregate, or classify applicants or employees in any way that could adversely affect any applicant's or employee's employment opportunities or status because of sex.

(3) A recipient shall not enter into any contractual or other relationship which directly or indirectly has the effect of subjecting employees or students to discrimination prohibited by Sec. Sec. 1253.500 through 1253.550, including relationships with employment and referral agencies, with labor unions, and with organizations providing or administering fringe benefits to employees of the recipient.

(4) A recipient shall not grant preferences to applicants for employment on the basis of attendance at any educational institution or entity that admits as students only or predominantly members of one sex, if the giving of such preferences has the effect of discriminating on the basis of sex in violation of these Title IX regulations.

### (b) *Application.* The provisions of Sec. Sec. 1253.500 through 1253.550 apply to:

(1) Recruitment, advertising, and the process of application for employment

(2) Hiring, upgrading, promotion, consideration for and award of tenure, demotion, transfer, layoff, termination, application of nepotism policies, right of return from layoff, and rehiring

(3) Rates of pay or any other form of compensation, and changes in compensation

(4) Job assignments, classifications, and structure, including position descriptions, lines of progression, and seniority lists

(5) The terms of any collective bargaining agreement

(6) Granting and return from leaves of absence, leave for pregnancy, childbirth, false pregnancy, termination of pregnancy, leave for persons of either sex to care for children or dependents, or any other leave

(7) Fringe benefits available by virtue of employment, whether or not administered by the recipient

(8) Selection and financial support for training, including apprenticeship, professional meetings, conferences, and other related activities, selection for tuition assistance, selection for sabbaticals and leaves of absence to pursue training

(9) Employer-sponsored activities, including social or recreational programs, and

(10) Any other term, condition, or privilege of employment.

## SEC. 1253.505 EMPLOYMENT CRITERIA.

A recipient shall not administer or operate any test or other criterion for any employment opportunity that has a disproportionately adverse effect on persons on the basis of sex unless:

(a) Use of such test or other criterion is shown to predict validly successful performance in the position in question, and

(b) Alternative tests or criteria for such purpose, which do not have such disproportionately adverse effect, are shown to be unavailable.

**SEC. 1253.510 RECRUITMENT.**

(a) *Nondiscriminatory recruitment and hiring.* A recipient shall not discriminate on the basis of sex in the recruitment and hiring of employees. Where a recipient has been found to be presently discriminating on the basis of sex in the recruitment or hiring of employees, or has been found to have so discriminated in the past, the recipient shall recruit members of the sex so discriminated against so as to overcome the effects of such past or present discrimination.

(b) *Recruitment patterns.* A recipient shall not recruit primarily or exclusively at entities that furnish as applicants only or predominantly members of one sex if such actions have the effect of discriminating on the basis of sex in violation of Sec. Sec. 1253.500 through 1253.550.

**SEC. 1253.515 COMPENSATION.**

A recipient shall not make or enforce any policy or practice that, on the basis of sex:

(a) Makes distinctions in rates of pay or other compensation

(b) Results in the payment of wages to employees of one sex at a rate less than that paid to employees of the opposite sex for equal work on jobs the performance of which requires equal skill, effort, and responsibility, and that are performed under similar working conditions.

**SEC. 1253.520 JOB CLASSIFICATION AND STRUCTURE.**

A recipient shall not:

(a) Classify a job as being for males or for females

(b) Maintain or establish separate lines of progression, seniority lists, career ladders, or tenure systems based on sex, or

(c) Maintain or establish separate lines of progression, seniority systems, career ladders, or tenure systems for similar jobs, position descriptions, or job requirements that classify persons on the basis of sex, unless sex is a bona fide occupational qualification for the positions in question as set forth in Sec. 1253.550.

**SEC. 1253.525 FRINGE BENEFITS.**

(a) *"Fringe benefits" defined.* For purposes of these Title IX regulations, fringe benefits means: Any medical, hospital, accident, life insurance, or retirement benefit, service, policy or plan, any profit-sharing or bonus plan, leave, and any other benefit or service of employment not subject to the provision of Sec. 1253.515.

(b) *Prohibitions.* A recipient shall not:

(1) Discriminate on the basis of sex with regard to making fringe benefits available to employees or make fringe benefits available to spouses, families, or dependents of employees differently upon the basis of the employee's sex

(2) Administer, operate, offer, or participate in a fringe benefit plan that does not provide for equal periodic benefits for members of each sex and for equal contributions to the plan by such recipient for members of each sex, or

(3) Administer, operate, offer, or participate in a pension or retirement plan that establishes different optional or compulsory retirement ages based on sex or that otherwise discriminates in benefits on the basis of sex.

**SEC. 1253.530 MARITAL OR PARENTAL STATUS.**

(a) *General.* A recipient shall not apply any policy or take any employment action:

(1) Concerning the potential marital, parental, or family status of an employee or applicant

for employment that treats persons differently on the basis of sex, or

(2) Which is based upon whether an employee or applicant for employment is the head of household or principal wage earner in such employee's or applicant's family unit.

(b) *Pregnancy.* A recipient shall not discriminate against or exclude from employment any employee or applicant for employment on the basis of pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery therefrom.

(c) *Pregnancy as a temporary disability.* Subject to Sec. 1253.235(d), a recipient shall treat pregnancy, childbirth, false pregnancy, termination of pregnancy, recovery therefrom, and any temporary disability resulting therefrom as any other temporary disability for all job-related purposes, including commencement, duration, extensions of leave, payment of disability income, accrual of seniority and any other benefit or service, reinstatement, and under any fringe benefit offered to employees by virtue of employment.

(d) *Pregnancy leave.* In the case of a recipient that does not maintain a leave policy for its employees, or in the case of an employee with insufficient leave or accrued employment time to qualify for leave under such a policy, a recipient shall treat pregnancy, childbirth, false pregnancy, termination of pregnancy, and recovery therefrom as a justification for a leave of absence without pay for a reasonable period of time, at the conclusion of which the employee shall be reinstated to the status that she held when the leave began or to a comparable position, without decrease in rate of compensation or loss of promotional opportunities, or any other right or privilege of employment.

#### *SEC. 1253.535 EFFECT OF STATE OR LOCAL LAW OR OTHER REQUIREMENTS.*

(a) *Prohibitory requirements.* The obligation to comply with Sec. Sec. 1253.500 through 1253.550 is not obviated or alleviated by the existence of any State or local law or other requirement that imposes prohibitions or limits upon employment of members of one sex that are not imposed upon members of the other sex.

(b) *Benefits.* A recipient that provides any compensation, service, or benefit to members of one sex pursuant to a State or local law or other requirement shall provide the same compensation, service, or benefit to members of the other sex.

#### *SEC. 1253.540 ADVERTISING.*

A recipient shall not in any advertising related to employment indicate preference, limitation, specification, or discrimination based on sex unless sex is a bona fide occupational qualification for the particular job in question.

#### *SEC. 1253.545 PRE-EMPLOYMENT INQUIRIES.*

(a) *Marital status.* A recipient shall not make pre-employment inquiry as to the marital status of an applicant for employment, including whether such applicant is "Miss" or "Mrs."

(b) *Sex.* A recipient may make pre-employment inquiry as to the sex of an applicant for employment, but only if such inquiry is made equally of such applicants of both sexes and if the results of such inquiry are not used in connection with discrimination prohibited by these Title IX regulations.

#### *SEC. 1253.550 SEX AS A BONA FIDE OCCUPATIONAL QUALIFICATION.*

A recipient may take action otherwise prohibited by Sec. Sec. 1253.500 through 1253.550 provided

it is shown that sex is a bona fide occupational qualification for that action, such that consideration of sex with regard to such action is essential to successful operation of the employment function concerned. A recipient shall not take action pursuant to this section that is based upon alleged comparative employment characteristics or stereotyped

characterizations of one or the other sex, or upon preference based on sex of the recipient, employees, students, or other persons, but nothing contained in this section shall prevent a recipient from considering an employee's sex in relation to employment in a locker room or toilet facility used only by members of one sex.

SUBPART E

# PROCEDURES

*SEC. 1253.600 NOTICE OF COVERED PROGRAMS.*

Within 60 days of September 29, 2000, each Federal agency that awards Federal financial assistance shall publish in the Federal Register a notice of the programs covered by these Title IX regulations. Each such Federal agency shall periodically republish the notice of covered programs to reflect changes in covered programs. Copies of this notice also shall be made available upon request to the Federal agency's office that enforces Title IX.

*SEC. 1253.605 ENFORCEMENT PROCEDURES.*

The investigative, compliance, and enforcement procedural provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d) ("Title VI") are hereby adopted and applied to these Title IX regulations. These procedures may be found at 14 C.F.R. 1250.105 through 1250.110.

[65 F.R. 52877, Aug. 30, 2000]

## APPENDIX B

# Department of Justice Title IX Q&A

*Title IX of the Education Amendments of 1972, as amended, is a comprehensive Federal law that prohibits discrimination on the basis of sex in any federally funded education program or activity. In addition to traditional educational institutions such as colleges, universities, and elementary and secondary schools, Title IX also applies to any education or training program operated by a recipient of Federal financial assistance. Many of these education program providers/recipients became subject to Title IX regulations when the Title IX final Common Rule was published on August 30, 2000. All Federal agencies that provide funding for any education or training programs have new responsibilities in ensuring that their recipients comply with the nondiscrimination mandate of Title IX and its procedural requirements by establishing a method for receiving and resolving sex-based discrimination complaints. Listed below are questions and answers regarding some of the basic procedural requirements. For a more comprehensive overview, refer to the Title IX Final Common Rule for 21 Federal agencies: “Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance” (65 Fed. Reg. 52857).*

## ASSURANCES

*Question 1: What is the purpose of an assurance?*

An assurance ensures that applicants and recipients of Federal financial assistance (FFA) are aware of their obligations to operate all of their education programs or activities in compliance with the nondiscrimination mandates of Title IX and the Title IX implementing regulations. See generally 65 Fed. Reg. 52867 at § .115.

*Question 2: What must be contained in an assurance?*

The assurance must state that the applicant or recipient will comply with all applicable Federal statutes relating to nondiscrimination by recipients of Federal financial assistance. This includes, but is not limited

to, Title IX. The Title IX regulations require that the assurance must contain language that commits the applicant or recipient to undertake whatever remedial action is necessary to eliminate any existing sex discrimination or to eliminate the effects of past discrimination—regardless of whether the discrimination occurred prior to or subsequent to the submission of the assurance.

The Title IX regulations do not require Federal agencies to use any specific language in the assurance, but they do require the Federal agencies to designate the form of the assurance and the extent to which assurances will be required of the applicant’s or recipient’s subgrantees, contractors, subcontractors, transferees, or successors in interest.

*Question 3: Is every application for or award of FFA required to have an assurance?*

No. The Title IX regulations eliminated the requirement that assurances be provided with each and every application for FFA. Instead, either at the application or award stage, Federal funding agencies must ensure that every application for or award of FFA contain, be accompanied by, or be covered by a specifically identified assurance.<sup>1</sup> See 65 Fed. Reg. 52867 at § .115(a).

*Question 4: What is the duration of the assurance obligations?*

Generally, recipients of FFA are obligated to comply with the nondiscrimination mandates of Title IX and

1. Note that Title IX regulations have eliminated the requirement contained in the Department of Education’s Title IX Rule (See 34 C.F.R. § 106.4(a)) and the proposed Title IX Common Rule (See 64 Fed. Reg. 58576 at § .115) that every application contain or be accompanied by an assurance. This not only gives Federal funding agencies the flexibility to obtain the assurance at either the application or award stage, but also streamlines the Federal grants process by eliminating the need for grant-by-grant certifications.

the Title IX regulations for the period during which Federal funding is provided.

**Real Property** However, in the case of FFA to provide real property to operate an education program or activity, the assurance obligations shall be in effect for the time period during which the real property is used to provide an education program or activity. If there is a subsequent transfer of the real property, the transferees must comply with assurance obligations for the duration of the time period in which the property is used to provide and education program or activity.

**Personal Property** Where FFA is provided in the form of personal property, the recipient's assurance obligations remain in effect for the time period during which it retains ownership or possession of the property.

*Question 5: What else do Federal funding agencies need to know about assurances?*

Under the Title IX regulations, Federal funding agencies have a duty to require that recipients of FFA are aware of the obligations to comply with the nondiscrimination provisions of Title IX and Title IX regulations. It is important to note that the Supreme Court has upheld the regulatory power of funding agencies to terminate a recipient's FFA for failure to execute an assurance of compliance with Title IX.

#### DESIGNATION OF TITLE IX COORDINATOR<sup>2</sup>

The Title IX Coordinator is the responsible employee of the recipient with major responsibility for Title IX compliance efforts. The Title IX Coordinator's

responsibilities are critical to the development, implementation, and monitoring of meaningful efforts to comply with Title IX. Therefore, Federal funding agencies must inform their recipients of the following obligations under the Title IX regulations:

Under the Title IX regulations, a recipient must designate at least one employee to serve as its Title IX Coordinator. See 65 Fed Reg. 52867 at § .135(a). Ideally, this person may be the employee designated to handle Section 504 complaints. The recipient must notify all its students and employees, of the name, office, address, and telephone number of the employee(s) designated to serve as the Title IX Coordinator.

*Question 1: What are the responsibilities of the Title IX Coordinator?*

The Title IX Coordinator has a responsibility to coordinate the recipient's efforts to comply with its obligations under Title IX and the Title IX regulations. These responsibilities include coordinating any investigations of complaints received pursuant to Title IX and the implementing regulations.

*Question 2: What factors should a recipient consider in designating a Title IX Coordinator?*

The tasks and responsibilities relating to the implementation and administration of the grievance process, which include, but are not limited to:

- providing consultation and information regarding Title IX requirements to potential complainants
- distribution of grievance forms to potential complainants
- receipt of formal grievances and providing notification to complainants of receipt of the grievance
- scheduling grievance hearings
- moderation of grievance procedures
- notification to all parties regarding grievance decisions

2. Refer to the Department of Education document: "Title IX Grievance Procedures: An Introductory Manual" for detailed information on the duties and responsibilities of a Title IX Coordinator. This document is available by request through the Department of Education Web site.

- notification of complainants of the right and procedures of appeal
- monitoring compliance of all requirements and timelines specified in the grievance procedures
- training of staff responsible for grievance procedures
- maintenance of grievance and compliance records and files
- provision of ongoing training, consultation, technical assistance, and information services regarding Title IX requirements, grievance issues, and compliance programs.

The competencies and skills necessary for the effective administration of the grievance process and related activities, which include, but are not limited to:

- in-depth knowledge of the Title IX regulation
- general knowledge of other Federal and State non-discrimination laws
- knowledge of the recipient agency's Title IX grievance procedures
- knowledge of personnel policies and practices of the recipient agency/institution
- ability to prepare reports on the Title IX compliance activities and make recommendations for action by appropriate decision makers
- ability to communicate effectively
- ability to diagnose, clarify, and mediate differences of opinion
- ability to establish a positive climate for Title IX compliance efforts.

Basic principles regarding the effective functioning of the Title IX Coordinator within the structure of the recipient agency/institution, which cannot be effective unless:

- the functions and responsibilities of the Title IX Coordinator are clearly delineated and communicated to all levels of the recipient agency/institution administration and to all employees and students

- the Title IX Coordinator is provided all information and authority or access necessary to enforce compliance requirements.

### GRIEVANCE PROCEDURES<sup>3</sup>

*Question 1: What are the obligations of Federal funding agencies and their recipients?*

Federal funding agencies must inform their recipients of the following:

Recipients must adopt and publish internal grievance procedures to promptly and equitably resolve complaints alleging discrimination on the basis of sex in its education programs or activities. See 65 Fed. Reg. 52867 at § .135(b).

*Question 2: What is a grievance procedure?*

The grievance procedure is a mechanism used to determine whether a particular act, policy, or practice of a recipient complies with Title IX regulations. The grievance procedures also provide the steps necessary to correct the policy or practice that does not comply with Title IX regulations and to remedy any effects of discrimination upon affected individuals.

*Question 3: Can a recipient use its existing discrimination grievance procedures for complaints of sex harassment?*

Although Federal law permits recipients to use their discrimination complaint procedures for complaints of sex harassment, it is recommended that recipients develop and use grievance procedures tailored specifically to allegations of harassment. Due to the sensitive nature of sexual harassment complaints, confidentiality may be a higher priority than in regular

3. Refer to the Department of Education document: "Title IX Grievance Procedures: An Introductory Manual," available by request through the Department of Education Web site at <http://www.ed.gov/about/pubs/intro/index.html> for detailed information on Title IX grievance procedures.

discrimination complaints. Thus, a grievance procedure that differs from the standard grievance procedure, at least during the early stages of proceedings, may be appropriate.

*Question 4: Do the Title IX regulations specify a certain structure or format for grievance procedures?*

Title IX regulations do not specify a structure or format for the grievance procedures. Instead, each recipient must develop grievance procedures that most effectively provide for prompt and equitable resolution of complaints. For those recipients who do not have Title IX grievance procedures or for those recipients who want to refine existing procedures, the Department of Education's guidance document, "Title IX Grievance Procedures: An Introductory Manual," (available by request at: <http://www.ed.gov/offices/OCR/publications.html>) provides some of the basic components of developing effective grievance procedures.

*Question 5: Does the existence of Title IX grievance procedures affect the right of an individual or group to file a Federal complaint regarding possible Title IX violations?*

No. Individuals or groups may file a Federal complaint without using the existing Title IX grievance procedures; alternatively, individuals may simultaneously file an internal grievance and file a Federal complaint; or after the unsatisfactory resolution of their grievance through the recipient agency/institution grievance procedure, file a Federal claim.

**Points to Consider** It is important to note that there is no private right of action for damages for a recipient's failure to establish grievance procedures under Title IX. However, requirements under Title IX regulations to establish such procedures can be enforced administratively by the Federal funding agency.

#### *DISSEMINATION OF THE TITLE IX POLICY*

The Title IX regulations require each recipient to take specific steps to regularly and consistently notify the public, i.e., participants, employees, applicants, etc. that it does not discriminate on the basis of sex in the operation of its education programs and activities, pursuant to its obligations to comply with Title IX and the implementing regulations. See generally 65 Fed. Reg. 52867 at § .140.

*Question 1: What specific information are recipients required to disseminate?*

The Federal funding agency may specify the information it finds necessary to be contained in the recipients' notification in order to fully apprise the recipient's participants and/or employees of their protections under Title IX and the implementing regulations. However, at a minimum, the notification must contain the following:

- Title IX and the Title IX regulations also apply to employment in and admission to the recipient's education programs and activities.
- Inquiries regarding Title IX and the Title IX regulations can be referred to the recipient's designated Title IX Coordinator or to the Federal funding agency.

*Question 2: When do recipients have to issue this notification?*

Under the Title IX regulations, each recipient is required to make its initial notification within 90 days or September 29, 2000 or as of the date the Title IX regulations apply to the recipient—which ever is the later date.

*Question 3: Where must the notifications be disseminated?*

**Initial Notification** Title IX regulations require recipients to notify the public of the protections assured to them under Title IX and the implementing regulations by:

- publishing the notification in newspapers<sup>4</sup> and magazines operated by the recipient or by student or alumnus groups for, or in connection with, the recipient, and
- publishing the notification in memoranda or other written communications distributed to every student or employee of the recipient.

**Subsequent Notification** Each recipient must prominently publish a statement of its Title IX policy in each announcement, bulletin, catalog, or application form that it makes available to the public or is used in connection with any recruitment of students or employees.

Recipients must ensure that the notification is widely disseminated and easily understood.

*Question 4: What else do recipients need to know about distributing their Title IX policies?*

Recipients must not use or distribute a publication that suggests by its text or illustration that it treats applicants, students, or employees differently on the basis of sex—except as permitted under the Title IX regulations.

Each recipient must distribute its Title IX policies, without discrimination on the basis of sex, and must inform each of its admission and employment recruitment representatives of Title IX's nondiscrimination policies. Each recipient must ensure that these representatives adhere to these policies.

#### REMEDIAL ACTION, AFFIRMATIVE ACTION, SELF-EVALUATION, AND TRANSITION PLANS

*Question 1: What type of remedial action must recipients provide under Title IX regulations?*

4. Note that unlike Department of Education requirements (See 34 C.F.R. § 106.9(2)(a)) and the proposed Title IX Common Rule (See 64 Fed. Reg. 58577 at § .140(2)), the final Title IX regulations do not require publication in local newspapers.

If the Federal funding agency finds that the recipient violated Title IX, the recipient must undertake the remedial action the Federal funding agency deems necessary to overcome the effects of such discrimination.

*Question 2: Can a recipient take affirmative steps to address the results of past sex discrimination?*

Yes. Even where there is no finding of a Title IX violation, a recipient may take affirmative steps consistent with the law to overcome the effects of conditions that resulted in limited participation of persons of a particular sex in the recipient's education program or activity.

*Question 3: Does every recipient have to conduct a self-evaluation of its current policies and practices as it relates to Title IX?*

No. Although § .110 of the Title IX regulations states that recipients must conduct a self-evaluation, it should be noted that this requirement only applies to recipient educational institutions. Most such recipients are covered by the Department of Education's Title IX regulations and have complied with this provision. However, an "educational institution" includes an institution of vocational education<sup>5</sup> and many of these schools may not have conducted a self-evaluation if they do not receive FFA from the Department of Education.

*Question 4: For those recipient education institutions that have NOT conducted a self-evaluation yet, what do the Title IX regulations require?*

Those recipient education institutions that have not conducted a self-evaluation are required under the

5. Defined under the Title IX regulations as "a school or institution.... that has as its primary purpose preparation of students to pursue a technical, skilled, or semiskilled occupation or trade, or to pursue study in a technical field, whether or not the school or institution offers certificates, diplomas, or degrees and whether or not it offers full-time study."

Title IX regulations to evaluate their current policies and practices and the effects of such policies and practices on the admission and treatment of students, and the employment of academic and non-academic personnel working in connection with the recipient education program or activity. See 65 Fed. Reg. 52867 at § .110(c)(1).

Recipient education institutions are also required to modify any of these policies and practices that do not or may not meet the requirements of the Title IX regulations. *Id.* at § .110(c)(2). In addition, these institutions must take appropriate remedial steps to eliminate the effects of any discrimination that resulted or may have resulted from such policies and practices. *Id.* at § .110(c)(3). After completion of the evaluation, these institutions must maintain on file for at least three years all self-evaluation and related materials and shall provide information regarding any modifications or remedial steps taken pursuant to the self-evaluation to the recipient agency's Title IX Coordinator.

*Question 5: For those recipient education institutions that have not conducted a self-evaluation yet, when must they comply with this Title IX regulation requirement?*

For those recipient education institutions that have never conducted a self-evaluation pursuant to the Title IX regulations, they are required to conduct the self-evaluation within one year of September 29, 2000.

*Question 6: What are transition plans?*

Title IX regulations state that a Title IX transition plan means a plan that is subject to the approval of the Secretary of Education under which an educational institution makes the transition from being an educational institution that admits students of one sex to being one that admits students of both sexes without discrimination. Note that the obligation to submit a transition plan is applicable only to those education institutions that receive FFA from the Department of Education since those are the only ones over which the Secretary of Education would have authority.

## APPENDIX C

# Summary Literature Review

## STEM FIELDS GENERALLY

In preparing to implement its Title IX program, NASA conducted a review of literature on women's participation in STEM fields, including Title IX policy and enforcement in the STEM context.<sup>1</sup> For example, NASA looked to the U.S. GAO report, *Gender Issues: Women's Participation in the Sciences Has Increased, but Agencies Need to Do More to Ensure Compliance with Title IX* (July 2004); and reports of the National Academy of Sciences, NRC, such as *To Recruit and Advance: Women Students and Faculty in Science and Engineering*, issued in November 2006.

The 2004 GAO Report focused on the need for Federal agencies with science missions to do more to ensure compliance with Title IX among their grant recipient institutions, such as conducting periodic compliance reviews of grantees. In addition, the report highlighted promising practices for increasing women's participation in STEM fields. A small sampling of the promising practices identified by GAO includes:

- outreach programs designed to increase the interest of younger students in the sciences

- development or expansion of campus child-care facilities
- flexible work schedules and tenure clock adjustments, and
- periodic climate surveys of attitudes and practices related to gender, that can help to raise education and awareness around the issue, and be an impetus for concrete steps to address concerns raised.

The NRC report *To Recruit and Advance* was based on a comprehensive literature review and site visits to four universities "recognized for successfully advancing and retaining women students, faculty or leaders."<sup>2</sup> The report was a valuable tool to understand women's experiences better in STEM fields and helped to guide NASA's assessment of these programs' promising practices regarding recruitment and advancement of students.<sup>3</sup> For example, the report identified the need to create and institutionalize a sustained commitment to diversity among university leaders and administrators.<sup>4</sup> This commitment should be demonstrated by dedicating resources to that effort, e.g., WIE programs, and through ensuring visibility for women students and faculty in communications materials and the department's Web site, which can help to show that the program is welcoming and inclusive of women.<sup>5</sup> Another key strategy is to extend outreach to students at the K–12 and undergraduate levels in the form of summer science and engineering camps, lecture series, career days, and mentoring programs.<sup>6</sup>

1. See generally, National Academy of Sciences, National Research Council, *To Recruit and Advance: Women Students and Faculty in Science and Engineering* (2006); GAO, *Gender Issues: Women's Participation in the Sciences Has Increased, but Agencies Need to Do More to Ensure Compliance with Title IX* (July 2004); Catherine Pieronek, *Title IX and Gender Equity in Science, Technology, Engineering and Mathematics Education: No Longer an Overlooked Application of the Law*, 31 J.C. & U.L. 295 (2005); Ellen Sekreta, *Sexual Harassment, Misconduct, and the Atmosphere of the Laboratory: The Legal and Professional Challenges Faced by Women Physical Science Researchers at Educational Institutions*, 13 Duke J. Gender L. & Pol'y 115 (Spring 2006); National Academy of Sciences, National Academy of Engineering and Institute of Medicine, *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering* (2006).

2. NRC Report, "Summary," p. 2.

3. NRC stated that it "sought to move beyond yet another catalogue of challenges facing the advancement of women academic in STEM to provide a document describing actions actually taken by universities to improve the situation for women." *Ibid.* "Preface," p. vii.

4. *Ibid.*, chap. 1, p. 8.

5. *Ibid.*, chap. 2, p. 47.

6. *Ibid.*

*To Recruit and Advance* indicated that specific retention tools such as curricular modifications and “family friendly” policies may also be of assistance in increasing the numbers of women in STEM programs. For example, courses designed to emphasize the societal benefits or “real-world” applications of engineering have broadened the appeal of engineering studies, helping to create more diverse engineering student populations.<sup>7</sup> Another important tool for STEM departments is training to raise awareness among faculty and students on gender issues such as sexual harassment prevention.<sup>8</sup>

Finally, *To Recruit and Advance* described issues that “may not be anticipated” influencing the working environment of the laboratory.<sup>9</sup> For example, personal safety issues may be different for women working alone at night in a lab. One faculty member interviewed by NRC commented that whereas general safety issues had been “background noise,” as he put it, the issue of personal safety became a much higher priority when women students joined the lab.

### PHYSICS PROGRAMS

To be aware of experiences of women in the physics context, NASA reviewed data on women in physics programs collected by the American Institute of Physics (AIP). This data showed some of the concerns of women physics students about their program experiences. For example, a 1993 AIP “climate” survey of physics programs showed that only

27 percent of women graduate student respondents in the U.S. believe that their department encourages self-confidence.<sup>10</sup>

In its 2001 survey report “Women Physicists Speak,” AIP observed that: “[w]omen . . . face barriers in the form of strongly held beliefs that [they] are incapable of doing good science”<sup>11</sup> and that “[c]onfidence in one’s ability can be especially important for female students when they confront the negative effects of sexism, which can cause women to question their ability or their right to pursue advanced degrees.”<sup>12</sup> And, in its 2006 report, *Women Physicists Speak Again*, the AIP continued to identify climate as one of the top reasons women physicists give for being discouraged about physics.<sup>13</sup>

In its literature review, NASA also relied on the summary report of the APS Committee on the Status of Women Site Visit Program. The report, “Improving the Climate for Women in Physics,” provides valuable information gathered by APS about women’s experiences in physics programs, based on site visits to over 40 university physics departments across the country since 1990.<sup>14</sup> For each site visit, APS reviews quantitative and qualitative information to assess the climate for women at the host facility.

The findings generated from APS’ site visit program provide valuable context for gender equity issues

7. Ibid., chap. 3, pp. 53 (citing Busch-Vishniac, I., and J. Jarosz, “Can diversity in the undergraduate engineering population be enhanced through curricular change?” *Journal of Women and Minorities in Science and Engineering* 10: 255, 281, 258 (2004), 55, 60 (citing Farrell, E. F., “Engineering a warmer welcome for female students,” *Chronicle of Higher Education*, (February 22, 2002).

8. Ibid., chap. 4, p. 78.

9. Ibid., chap. 2, p. 41.

10. See Jean M. Curtain, Geneva Blake, and Christine Cassagnau, AIP, “The Climate for Women Graduate Students in Physics,” *Journal of Women and Minorities in Science and Engineering*, vol. 3, pp. 95-117 (1997); see also APS Program Summary.

11. AIP Statistical Research Center, *Women in Physics Speak: The 2001 International Survey of Women in Physics*, 2001, p. 19. Accessible at: <http://www.aip.org/statistics/trends/reports/iupap.pdf>.

12. Ibid, p. 7.

13. AIP Statistical Research Center, *Women Physicists Speak Again*, April 2006, pp. 10-12. Accessible at: <http://www.aip.org/statistics/trends/reports/iupap05.pdf>.

14. APS Program Summary (accessible at <http://www.aps.org/programs/women/sitevisits/summary.cfm>).

in physics programs. According to APS, generic problems experienced by women in some of the physics departments reviewed included instances of inappropriate behavior and attitudes such as sharing and downloading of visually inappropriate images in program settings; thesis advisors who call their female students “honey” or the equivalent and “a prevalent assumption that all rewards obtained by women are “only because you are a woman.”<sup>15</sup> APS found that while none of these experiences are “earth-shattering” in and of themselves, the long-term effects can take “much of the enjoyment out of the graduate experience of many female physics students and helps to explain why only the very committed and the very tough remain in physics.”<sup>16</sup>

However, APS reports that the climate for women varies dramatically among the departments it has reviewed, with many positive climates reported.<sup>17</sup> Based on its Site Visit Program, APS finds that important ingredients for a positive climate can include: at

---

15. Ibid.

16. Ibid.

17. Ibid.

least several active, mainstream female faculty; a group of female students who interact regularly with each other; a supportive department chair who listens and responds to concerns of students; and efforts to create a safer physical environment.<sup>18</sup>

#### *PROACTIVE STEPS ACROSS STEM DISCIPLINES*

What the research literature tells us is that there are some proactive steps that STEM programs can take, consistent with the purpose and intent of Title IX, to recruit and retain students in these fields, and provide equal opportunities regardless of gender. A small sampling of these steps, representative of the larger themes in the literature on women and STEM, include:

- Engaging in targeted outreach and recruitment.
- Establishing mentoring programs.
- Sustaining strong partnerships with campus professional organizations, such as WIE.
- Adopting policies that enable faculty, students, and employees to combine work, family and other personal responsibilities.
- Conducting ongoing self-evaluation efforts.

---

18. Ibid.

## APPENDIX D

# Resources and Publications

NASA Office of Diversity and Equal Opportunity Title IX Compliance Program Summary (accessible at [http://www.hq.nasa.gov/office/codee/compliance\\_program.html](http://www.hq.nasa.gov/office/codee/compliance_program.html))

U.S. Department of Justice Civil Rights Division, Title IX Legal Manual (Jan. 11, 2001) (accessible at <http://www.usdoj.gov/crt/cor/coord/ixlegal.htm>)

U.S. Department of Justice technical assistance document “Questions and Answers Regarding Title IX Procedural Requirements,” (accessible at <http://www.usdoj.gov/crt/cor/coord/TitleIX/QandA.htm>)

U.S. Department of Education, Office for Civil Rights, “Revised Sexual Harassment Guidance: Harassment of Students by School Employees, Other Students, or Third Parties,” (Jan. 19, 2001) (accessible at <http://www.ed.gov/about/offices/list/ocr/docs/shguide.html>)

Government Accountability Office, *Gender Issues: Women’s Participation in the Sciences Has Increased, but Agencies Need to Do More to Ensure Compliance with Title IX* (July 2004)

Mildred S. Dresselhaus, Judy R. Franz, Bunny S. Clark, “Improving the Climate for Women in Physics: A Program of Site Visits Funded by the National Science Foundation” (American Physical Society and the American Association of Physics Teachers: 1995) (accessible at <http://www.aps.org/programs/women/sitevisits/summary.cfm>)

National Academy of Sciences, National Research Council, *To Recruit and Advance: Women Students and Faculty in Science and Engineering* (2006).

Catherine Pieronek, *Title IX and Gender Equity in Science, Technology, Engineering and Mathematics Education: No Longer an Overlooked Application of the Law*, 31 J.C. & U.L. 295 (2005).

Ellen Sekreta, *Sexual Harassment, Misconduct, and the Atmosphere of the Laboratory: The Legal and Professional Challenges Faced by Women Physical Science Researchers at Educational Institutions*, 13 Duke J. Gender L. & Pol’y 115 (Spring 2006).

National Academy of Sciences, National Academy of Engineering and Institute of Medicine, *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering* (2006).