Gender Diversity in Computer Science Academia

Purpose:

It’s no secret that the computer science major is heavily dominated by males. The purpose of this lab is to help you consider the importance of gender diversity. Males and females both bring different but equally important perspectives to the field of computer science and it is the intention of this lab to examine how a more diverse student body would benefit the major. While gender diversity in development teams offers advantages, it also raises some serious issues such as sexual harassment.

Procedure:

Code of Ethics:
What provision(s) in the Software Engineering Code of Ethics apply to this lab? Give a brief justification for each that you choose.

Pre-Lab Readings:
Numerous studies have been conducted in this area. Prior to continuing with this lab, carefully read the following studies, focusing on the conclusions that were drawn from them. Read through the lab before you begin and consider the questions you will be answering.

Gender Issues in Computer Science Education:
http://www.wcer.wisc.edu/nise/News_Activities/Forums/Klawepaper.htm

Cal Poly Sexual Harassment Policy:
http://employequity.calpoly.edu-sexual_harassment.html

Cal Poly Statement on Diversity:
http://www.academicprograms.calpoly.edu-academicpolicies/Diversity-statement.htm

1. Your Experience
   a. Think back to your 205/206 work groups. How many males and how many females were in your group? In the class? What were the ratios?
   b. How do you think the gender diversity (or lack of it) affected your group/class performance? How were duties assigned? How were positions assigned? What did various people contribute to the project? Were there any communication issues within genders? Across genders?
   c. How might your group dynamics have differed if there had been only one gender? If there had been a mix of genders?
2. **Faculty Interview**

   Each member of the group must interview a computer science/computer engineering professor about his/her experience with gender diversity in the classroom. No two members can interview the same professor, and both genders should be represented in your interviews. Prepare a list of at least three questions about issues they might have to deal with in academia, including at least one about sexual harassment.

   **Optional:**
   Instead of a CSc or CPE professor, interview a teacher from the MIS concentration of the Management Degree program in the College of Business. For this interview, focus on differences in diversity between CSc and MIS, in both educational and job-related environments.

3. **Discussion (be prepared to have this discussion in class)**

   a. In your group, discuss your experience with gender diversity (or lack thereof) in your 205/206 classes and in any professional environment where you may have worked. Discuss and share your personal answers from above, focusing on how the presence or absence of one gender affected group progress, communication, and the eventual end result of the class. List other people’s experiences and how (or if) they differed from your own.

   b. Compare and contrast the responses members of your group received from professors.

   c. What are some benefits of having gender diversity in a development team such as the ones created in 205/206? What are some drawbacks?

   d. Present objective reasons beyond “political correctness” for gender diversity in software engineering and computer science.

4. **Deliverables**

   On the date due, provide a single, professional lab report with the following:
   1. Code of Ethics Provisions (one list per group)
   2. Individual responses to Part 1
   3. Details of each faculty interview - more than what questions you asked, and what his or her response was. What can you conclude from what you have learned from this person?
   4. Answer Part 3.e. in a single paragraph (one per group). Why should we care about gender diversity in our educational environment? Should we?
   5. Group response to following question: What can we do to improve this lab exercise? What parts about it did you find worthwhile, and how can they be brought out more? What parts did you find unnecessary, and what would you replace them with?