

THE DEVELOPMENT OF A REENTRY
PROGRAM FOR WOMEN IN ENGINEERING
AT THE UNIVERSITY OF CENTRAL FLORIDA

BY

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RESEARCH REPORT

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ABSTRACT

In order to familiarize local women with advanced degree possibilities in engineering and with expanding local industry, as well as increasing the graduate enrollment in the College of Engineering, the University of Central Florida has developed a Reentry Program for Women in the Industrial Engineering Department. Master of Science degrees are offered to the women with four options: Operations Research, Computer Systems, Engineering Administration, and Engineering Systems Analysis.

The program is designed for women who received a bachelor's degree at least two years ago in mathematics, engineering, physics, or another hard science. Seed money for the program was obtained as a mini-grant from the Women's Reentry Consortium. The major component of the program is a mathematics review course which offers an intensive review of college math through differential equations.

An Industrial Advisory Board is an integral part of the program and is giving support for potential employment of women during their schooling and afterwards, as well as making sure the women are going in directions consistent with the needs of industry.

A special orientation, available tutoring, and a Professional Development Day are some of the features incorporated in this program. After the math review course, the women are mainstreamed into the standard graduate program with continued support.

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CHAPTER I

INTRODUCTION

During the past few years, women have been returning to school in increasing numbers. In order to familiarize more of these women with the advanced degree possibilities in engineering, the University of Central Florida set up the Reentry Program for Women in September 1981. Besides encouraging women into the non-traditional career path of engineering, the program is designed to familiarize women with the growing technological manpower needs in Central Florida, and to increase the enrollment at the graduate level in the College of Engineering.

Much has been written on women and the labor force, but less research has been done on the educational needs women experience (Lantz, 3). Even less has been written on women preparing to enter the engineering field after retraining at the graduate level. The purpose of this paper is to serve as a historical document for this innovative program's first year and make recommendations for the future of the Reentry Program for Women.

CHAPTER II

BACKGROUND FOR REENTRY PROGRAM FOR WOMEN

Reentry to what? Reentry in this context means returning to the academic world after a period of absence. The secondary definition may also be returning to the labor force. Why just women? The reason this program was initially started for just women is that the "seed money" for the project came from a grant which specified women.

The background of this grant began in the 1960's when the National Science Foundation (NSF) addressed the problem of the country's increasing need of people with technical training. Use needed to be made of every available resource and a generally untapped resource is women who have been trained in science or engineering and dropped out of the job market for a variety of reasons.

Figure 1 shows that in a study by the Scientific Manpower Commission in the time period of 1948-1980, more than 1,400,000 women have earned bachelor's degrees in science and engineering. Of these, only an estimated 300,000 are employed as scientists or engineers. Approximately 32,000 women are not seeking employment, which leaves over 1,000,000 women with adequate mathematics backgrounds who could possibly be interested in being retrained (Reentry, 1982).

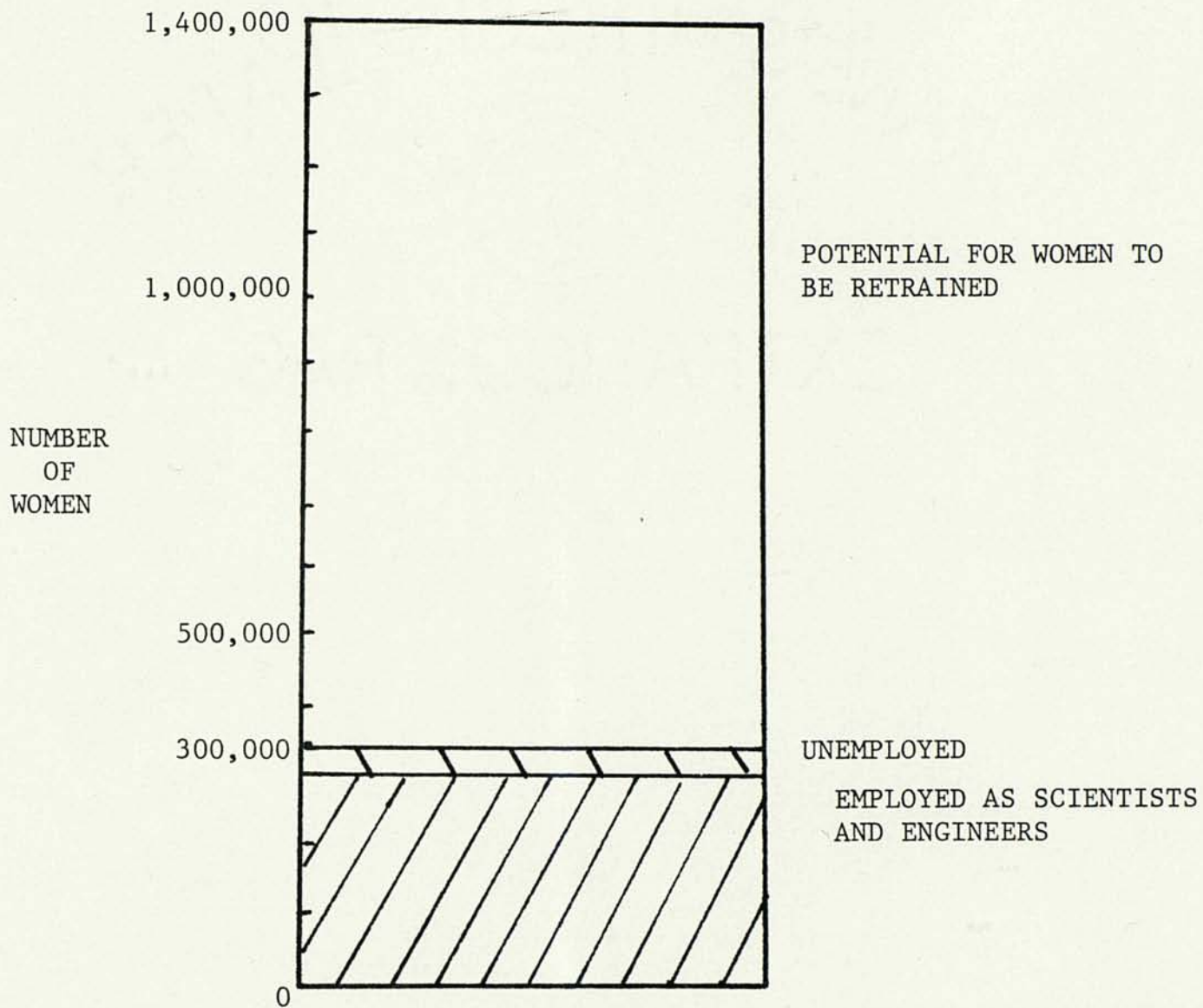


Figure 1. Status of women earning bachelor's degrees in science or engineering, 1948-1980.

