



Joanne McGrath Cohoon

**RECRUITING MESSAGES FOR  
MORE AND DIFFERENT STUDENTS**

# Intentional recruiting has several steps

## Recruiting Strategy

1 Identify Your Target Audience

Leverage Your Assets

2

3 Tailor Message Content

Reach Your Audience 4

5 Track & Report Results




# Our focus today is on tailoring messages

## Recruiting Strategy

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# Identify your audience

## Influencers

Family  
Friends  
Other teachers  
Counselors  
Coaches  
Group leaders  
Celebrities  
Boys



## Girls

College-bound girls  
Vocational track  
Honor Society  
Math class  
Math club  
Chess club  
Sports teams  
Music & Art  
Friendship groups



Think broadly about potential audiences  
**Go beyond geek**

# Analyze your audience

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What does your target group believe, value now?  
How can you fit these beliefs / meet these needs?

What are the target group's competing goals?  
e.g., Interest in saving the planet  
e.g., Desire to spend time with friends

What influences their behavior?

How can you overcome their objections?  
e.g., CS is too hard and will jeopardize my GPA



# Few Stable Gender Differences

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Women are more interested than men in protecting the environment

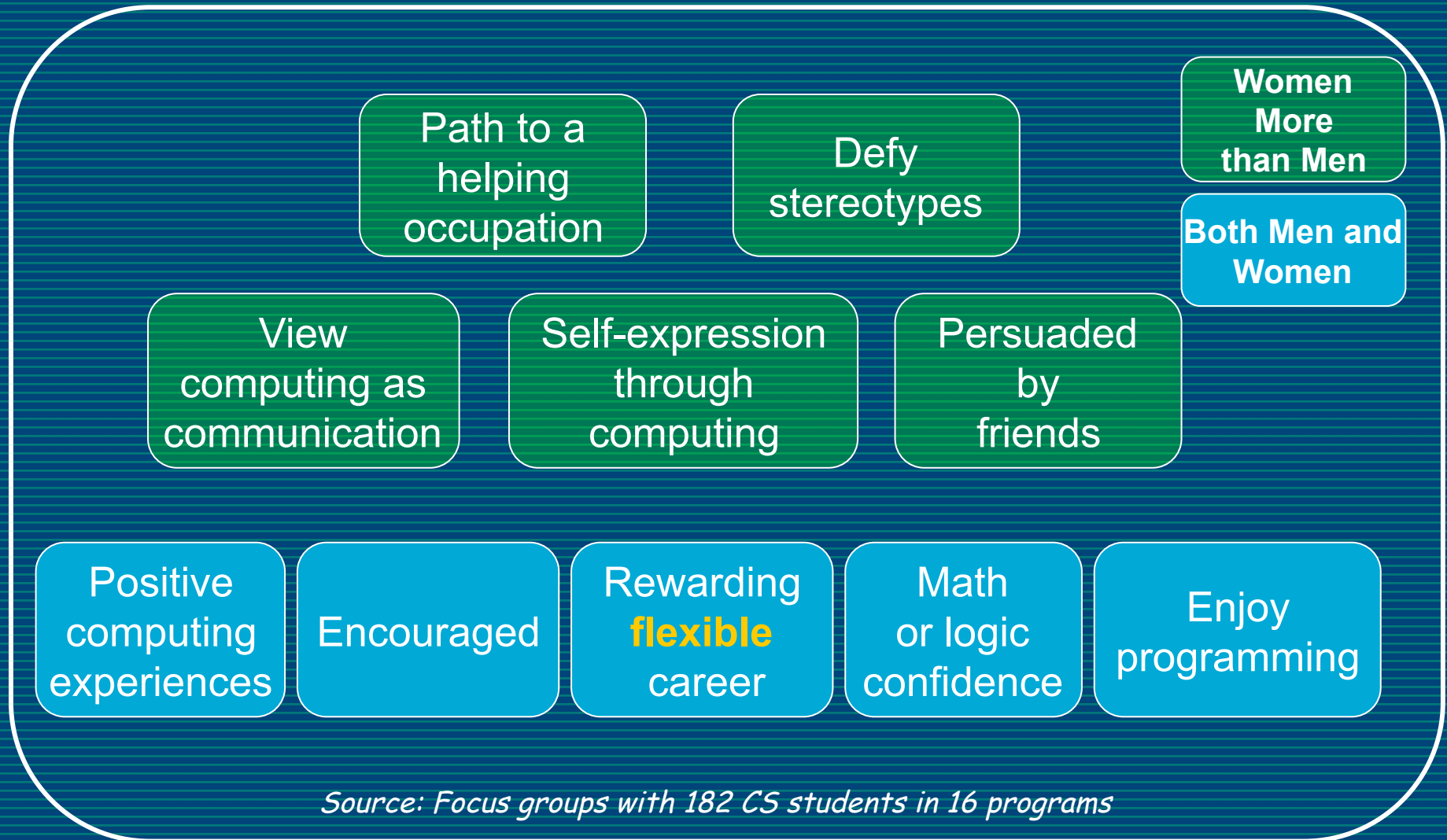


Men are more interested than women in war & military technology



Women will work for less pay than men

# What influenced CS majors?



*Source: Focus groups with 182 CS students in 16 programs*

# Defy stereotypes?

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Beware of communicating or reinforcing stereotypes

Do most 15 year-old girls want to grow up to be Dilbert???

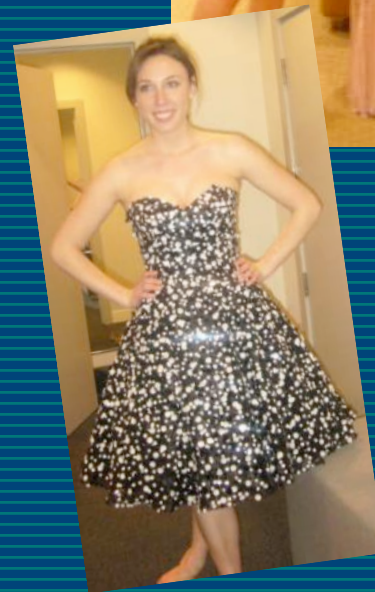




# What typically influences teen girls?

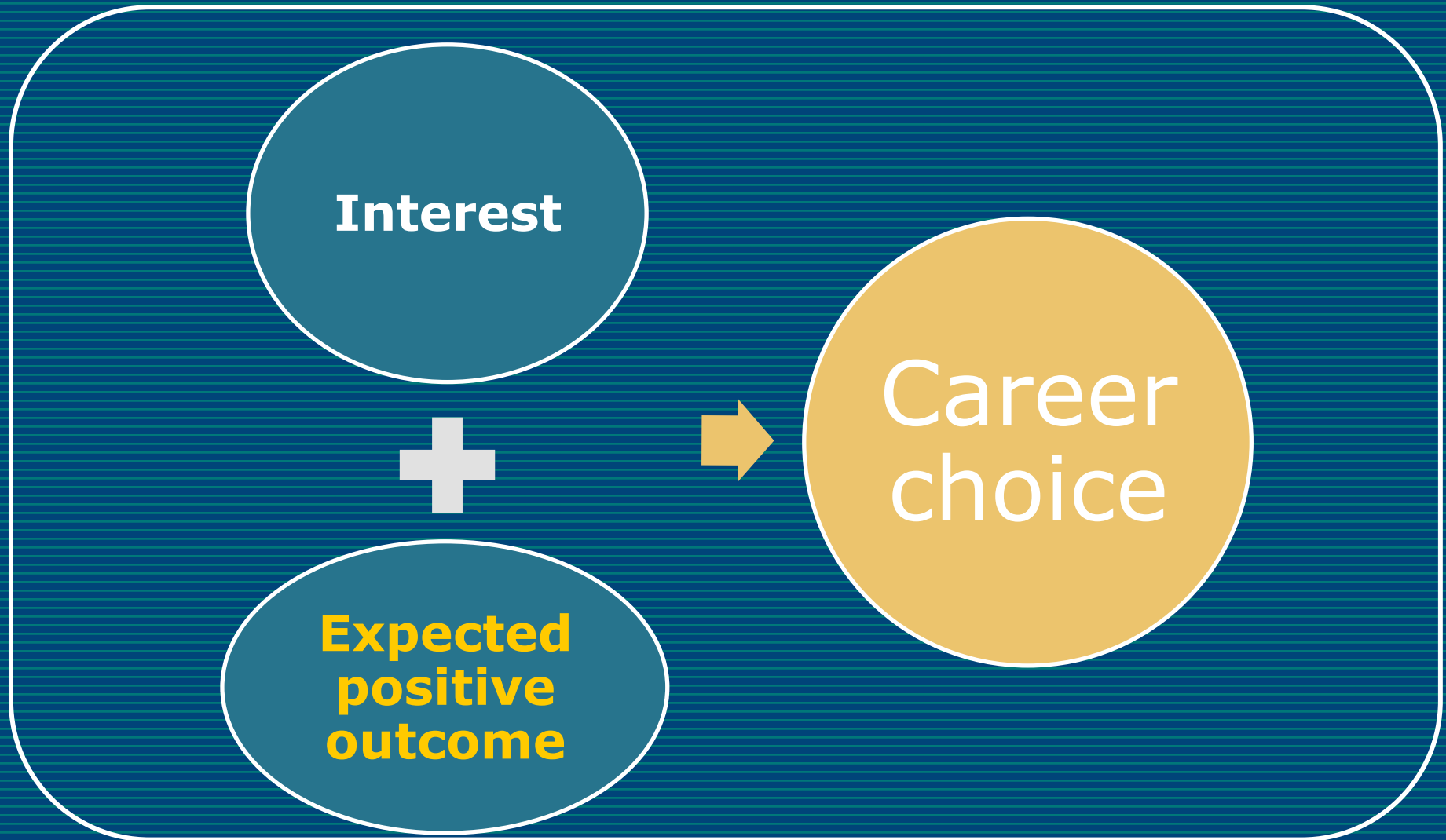
Belonging, with potential to  
have status in the group  
So, recruit groups instead of  
individuals

Role fulfillment - conforming  
to expectations  
So, talk about ways computing  
is social and helps people



# Tell them they can succeed if they work hard

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# What messages influence parents?

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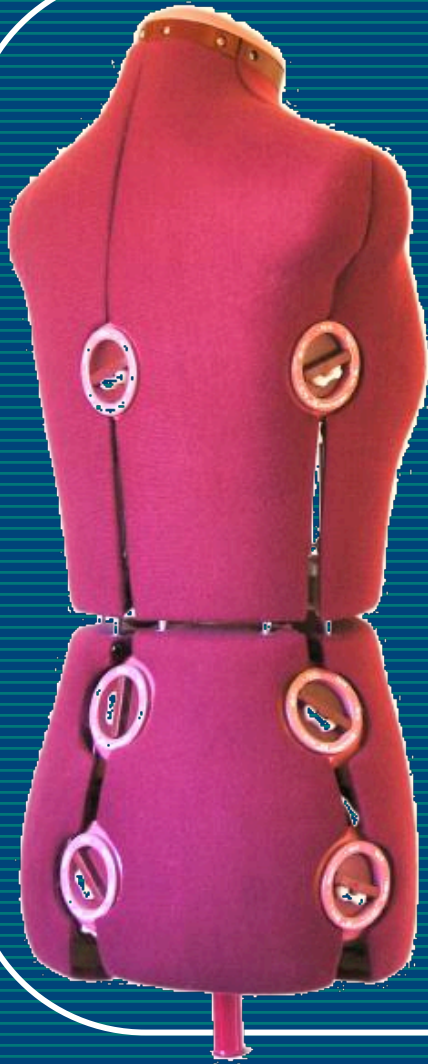
Research shows that parents have different career expectations for their sons and daughters

- ✓ Want sons to persevere for the sake of future family responsibilities
- ✓ Want daughters to "be happy" in their career

**So, be sure parents know that computing is a career that women can enjoy**

# Tailor your message content

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In discussion groups,  
brainstorm ideas for  
messages that will reach  
your target audiences

- What could you say to parents?
- What could you say to young women?
- What could you say to other teachers, principal, guidance councilors?

# How can you overcome their objections?

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CS is  
Boring  
Hard  
Machine-focused  
No jobs  
Who knows what  
it is?



# Overcome objections and biases



In a 1-1 conversation using student's name

- ✓ Listen and acknowledge student's expressed beliefs - "I understand why you think that CS is ..."
- ✓ Offer persuasive evidence - "... but can I show you the actual numbers?" or "but can I tell you about my former students?"
- ✓ Assure the student s/he can succeed
- ✓ Don't let refusal be permanent - "Can we talk again before you choose your courses for next year?"  
"If not now, consider CS in college"

## Overcome negative images – link to existing interests

Career code	N	Percent
<b>Medicine</b>	<b>104</b>	<b>16%</b>
Don't know	94	14%
<b>Veterinarian</b>	<b>60</b>	<b>9%</b>
Law	47	7%
Arts (singer, painter, etc)	45	7%
Science (e.g., chemist, foren	43	6%
Engineer	31	5%
Sports	27	4%
Law enforcement	27	4%
Teacher	23	3%
Architect	15	2%
Work with technology	14	2%

These goals appear to compete with computing but you could align them with computing



Source: 715 survey responses from middle school girls at a science, technology, engineering recruiting event

# Leverage your existing assets

*Too much to do all  
by yourself?*





# What assets do you have?

Alumni  
Parents of former  
students  
After-School Programs  
e.g., Girl Scouts  
Recruiting Materials,  
Information from  
National Sources  
(e.g., NCWIT, CSTA)  
???

**National Center for Women & Information Technology**  
K-12 Education Career Graduates

### Why should young women consider a career in Information Technology?

**Meaningful Work**  
IT professionals work on creative teams to develop cutting-edge products and solutions that save lives, solve health problems, improve the environment, and keep us connected.

**Security and High Salaries with a Bachelor's Degree**  
The U.S. Department of Labor predicts that IT jobs will be among the fastest-growing and highest-paying over the next decade. The jobs in greatest demand will require a computing degree. These jobs, critical to our nation's economy and security, also earn the highest entry-level salary of any bachelor's degree. Yet it takes less time to complete the

**Flexibility and Variety**  
Many IT careers offer flexible hours or telecommuting, making it easier to blend career and family. And IT professionals have skills that are useful in many different jobs.

**Unplugged: An engaging way to introduce computing**  
Computing is often a mystery. While people may know how to use computers, they rarely know what makes computers work. "CS Unplugged" uncovers the mystery by exposing students to computer science concepts, such as the nature of data or how data is sorted, but without the computer. The activities in "CS Unplugged" help to shatter the image of computing as long, lonely hours in front of an LCD screen by exposing learners to the kind of reasoning needed for inventing the next great idea in computing.

"CS Unplugged" activities engage students in learning computer science concepts using hands-on activities. The activity described here, "SortingNetwork," illustrates the structures used in parallel sorting networks, exposing learners to sorting, parallelism, and binary comparison through active, kinetic learning. In teams of six, students compare numbers (small or large) and follow simple logic.

**How do you do it?**  
Start by laying the layout below on the ground, using chalk on a pavement, masking tape for indoor surfaces, or electrical tape on a tarpaulin. Each student on the team holds a card with a number on it (for the first time, use the numbers from 1 to 6). The goal is to get the numbers sorted into order.

Each student stands on one of the squares on the "in" side of the diagram. Students follow the arrow to step onto the first circle, where they meet another student and compare numbers. The student with the smaller number follows the arrow out on their left, while the student with the larger number follows the arrow out on their right.

Students continue following the arrows to each circle as another student steps into the circle, each time comparing numbers. The smaller always goes left and the larger goes right. Eventually they will reach the "out" side in sorted order. (The full lesson plan, "Beat the Clock: Sorting Networks" can be found on the website described below.)

The exercise can be extended in a number of ways. For example, students could be timed to discover how quickly they can complete the sorting. For this, use larger numbers so it is hard to see where you are supposed to end up. And there are many questions to ponder: What if the smaller one goes to the right each time? How would you design a layout for sorting these numbers? Thirty numbers? Does it work backwards? Can you design a smaller layout to find the smallest number?

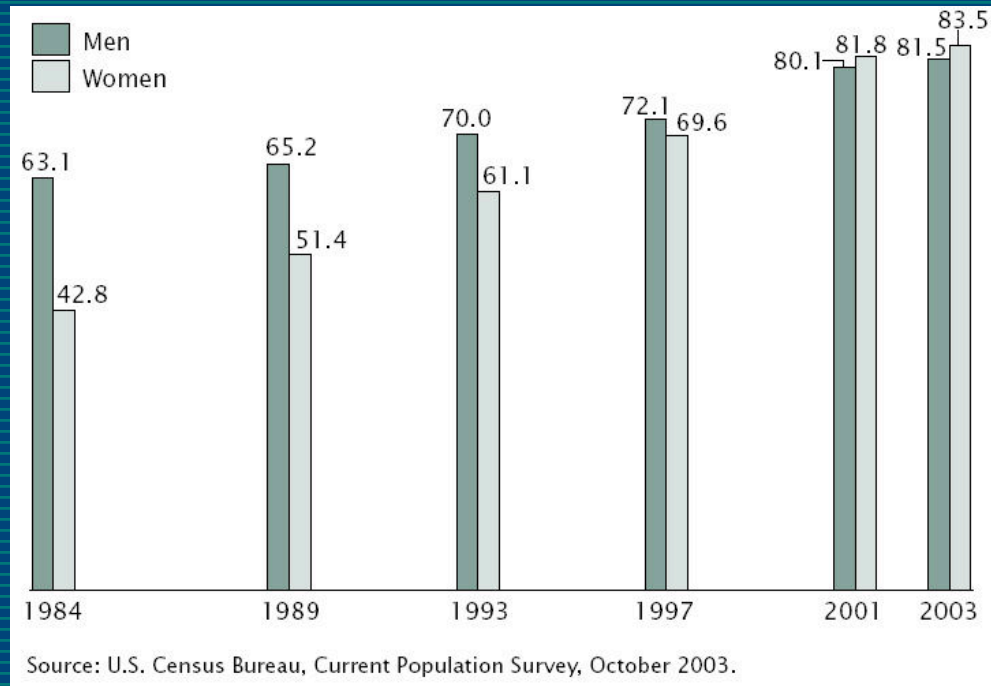
**What computing concepts do students learn?**  
When three pairs of students are comparing numbers at the same time, it takes much less time than comparing only one pair of numbers at a time. This "Sorting Network" demonstrates parallel computation, one of many ways that computer scientists have devised to sort data quickly. Instructors will indicate that they have just learned about the computing concepts behind computer applications with which they are familiar, such as alphabetical lists of files, etc.

Initial evaluations of sessions involving this activity and others show that children gain a better appreciation of what Computer Science is about, and gain in particular respect positively to the logic and problem solving. More detailed international evaluations are underway.

For more information on this activity and a pdf of the complete teacher's version, see <http://csunplugged.org>. "Computer Science Unplugged" is a free collection of activities and ideas for learning about Computer Science without using a computer.

Case study contributed by Dr. Tim Bell • [tim.bell@canterbury.ac.nz](mailto:tim.bell@canterbury.ac.nz)

# Don't forget to track your outcomes

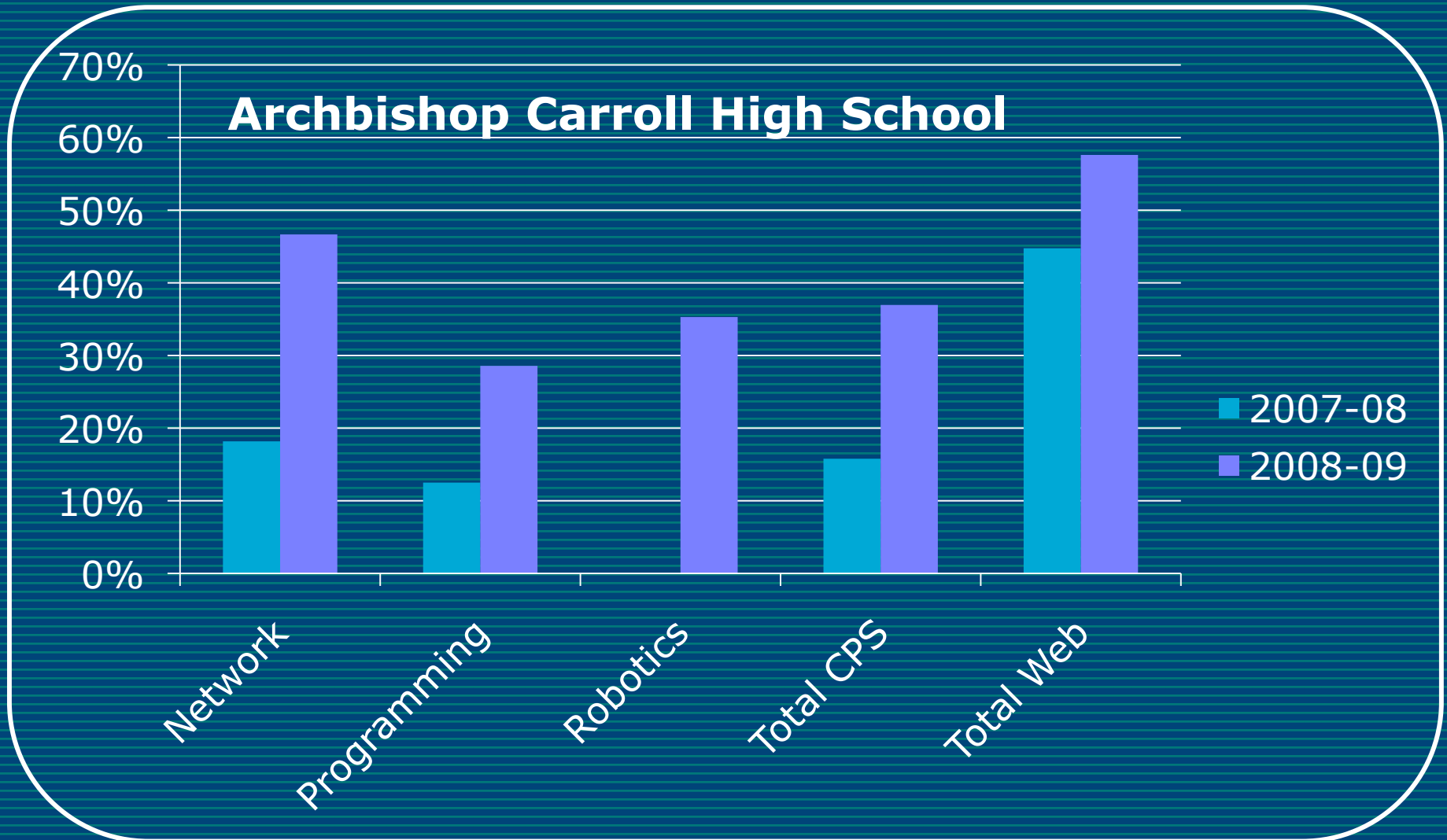


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Janet Lathan

**AN EXAMPLE OF EFFECTIVE  
RECRUITING**

# Young Women's Share of Enrollment



# Questions?

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# Personal Stories from Students

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