



University of California
San Francisco

Water To Go: Increasing Water Intake among Children in Santa Clara County

Santa Clara County Healthier Kids Foundation Symposium

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Presentation Goals

- Why is water provision and promotion important?
- Overview of Water To Go Project and evaluation
- Preliminary results from Water To Go evaluation



Background

Improving Water Intake Among Children is Important

- Drinking water instead of sugary drinks can prevent obesity and dental caries
- Being properly hydrated can help children learn
- Most U.S. children and adolescents do not drink enough water during the day

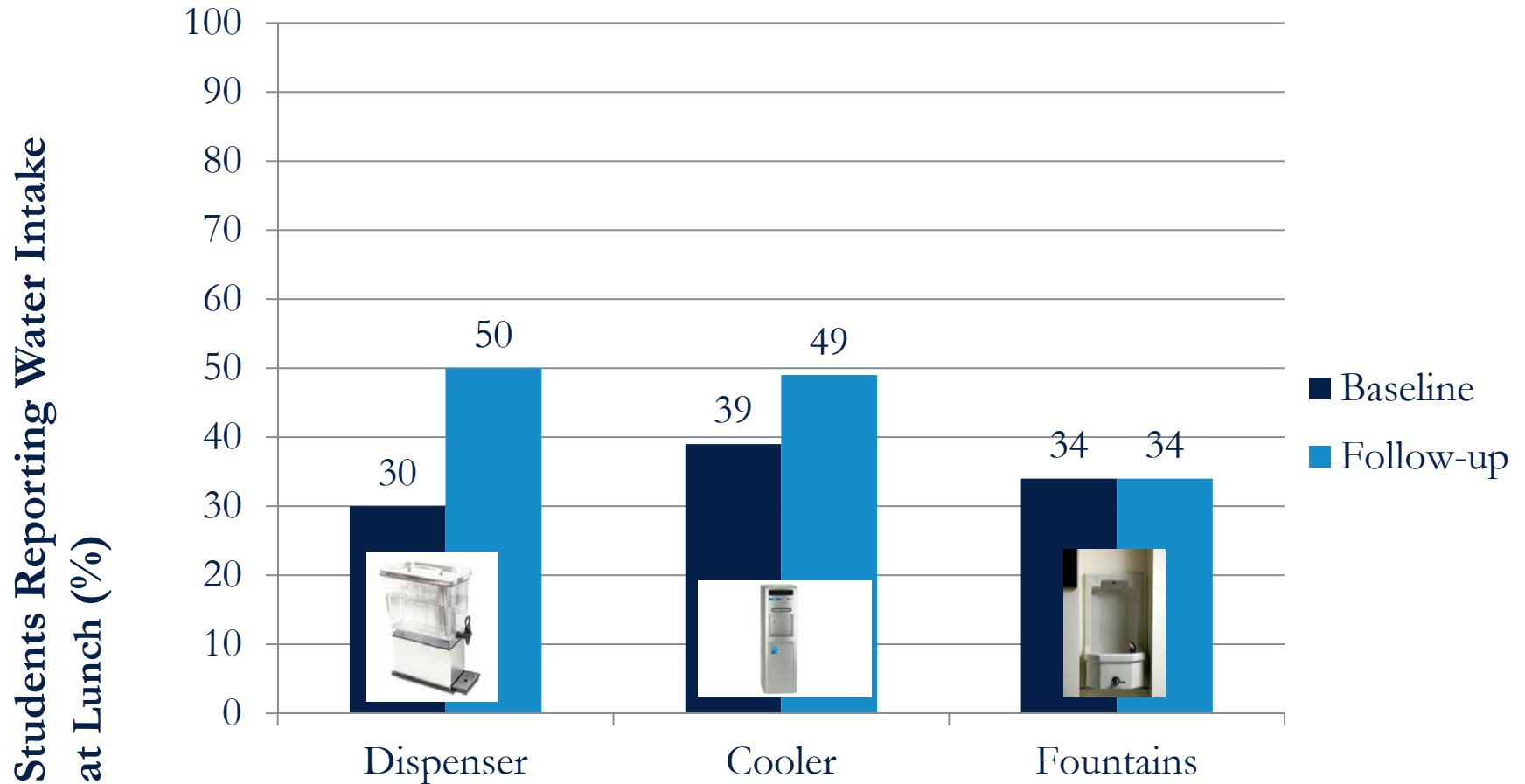


Many Children May Not Drink from Fountains

- Fountains are the most common water source
- Children may not drink from fountains due to concerns about:
 - Tap water safety
 - Poor water palatability
 - Improper fountain upkeep
 - Inadequate access
 - Lack of cups or water bottles



Access to Appealing Water Increases Water Intake



Water to Go Program



The Water to Go Program



- **Purpose:**

Water to Go aims to increase access to and utilization of safe, fresh tap water for children and families through the installation and promotion of 100 water bottle filling stations.

- **Water to Go Partners:**



Water to Go – Inspired by Legislation

- **California SB1413**

- Enacted in September 2010
- Requires all schools in California to provide access to free, fresh drinking water during meal times

- **Healthy, Hunger-Free Kids Act**

- Enacted in December 2010
- Improves child nutrition policy in many important ways
 - Includes a provision requiring schools participating in federal meals programs to make free drinking water available with school meals

Water to Go – Selection Criteria

- **FIRST 5 and Santa Clara Valley Water District School Selection Criteria:**
 - Schools with children with body mass index (BMI) scores considered “high risk”
 - Schools located near pre-school/childcare centers or FIRST 5 Santa Clara County Family Resource Centers
 - Broad geographic representation

- **Santa Clara County Public Health Site Selection Criteria:**
 - Areas accessible to the public
 - Fill a need for drinking water access
 - In an area with high use by children and families

Water to Go School Affiliated Sites

SCHOOL DISTRICT	SCHOOL SITES
Alum Rock Union	Chavez, Arbuckle, Hubbard, Linda Vista, Lyndale, Cureton, McEntee/Russo, McCollam
Berryessa Union	Northwood
Campbell Union	Sherman Oaks
East Side High School District	Overfelt, Yerba Buena, Evergreen Valley
Franklin McKinley	Dahl, Santee, Kennedy
Gilroy Unified	Rod Kelley
Moreland	Leroy Anderson
Morgan Hill Unified	El Toro
Mountain View-Whisman	Theurkauf

Water to Go – Elementary School Program

- Installation of hydration stations (reusable water bottle filling stations) in school cafeterias
- Promotion of stations
 - “Potter the Otter” signs near stations
 - Short Sugar Savvy presentation for students/teachers
 - Potter the Otter play (preschool-3rd grade)
 - Potter the Otter books for students to take home (TK-3rd grade)
 - Water bottle distribution to students and teachers

Hydration Stations and Signs



Promotional Launch Events



Distribution of Water Bottles



Program Evaluation

Water to Go – School Evaluation

- Participants:
 - Water To Go “intervention” schools and matched control schools
 - Evaluation before and after the program

- Main outcomes:
 - Number and function of existing water sources (school water audit)
 - Student intake of water, SSBs, milk, and juice
 - Student surveys
 - Lunchtime observations of student intake
 - Flowmeter readings from water stations and fountains

Water to Go – School Evaluation

- Secondary outcomes
 - Beverage offerings in child care centers near study schools
 - Child care provider surveys
 - Teacher and child care provider intake of beverages at school/child care centers
 - Teacher surveys
 - Child care provider surveys

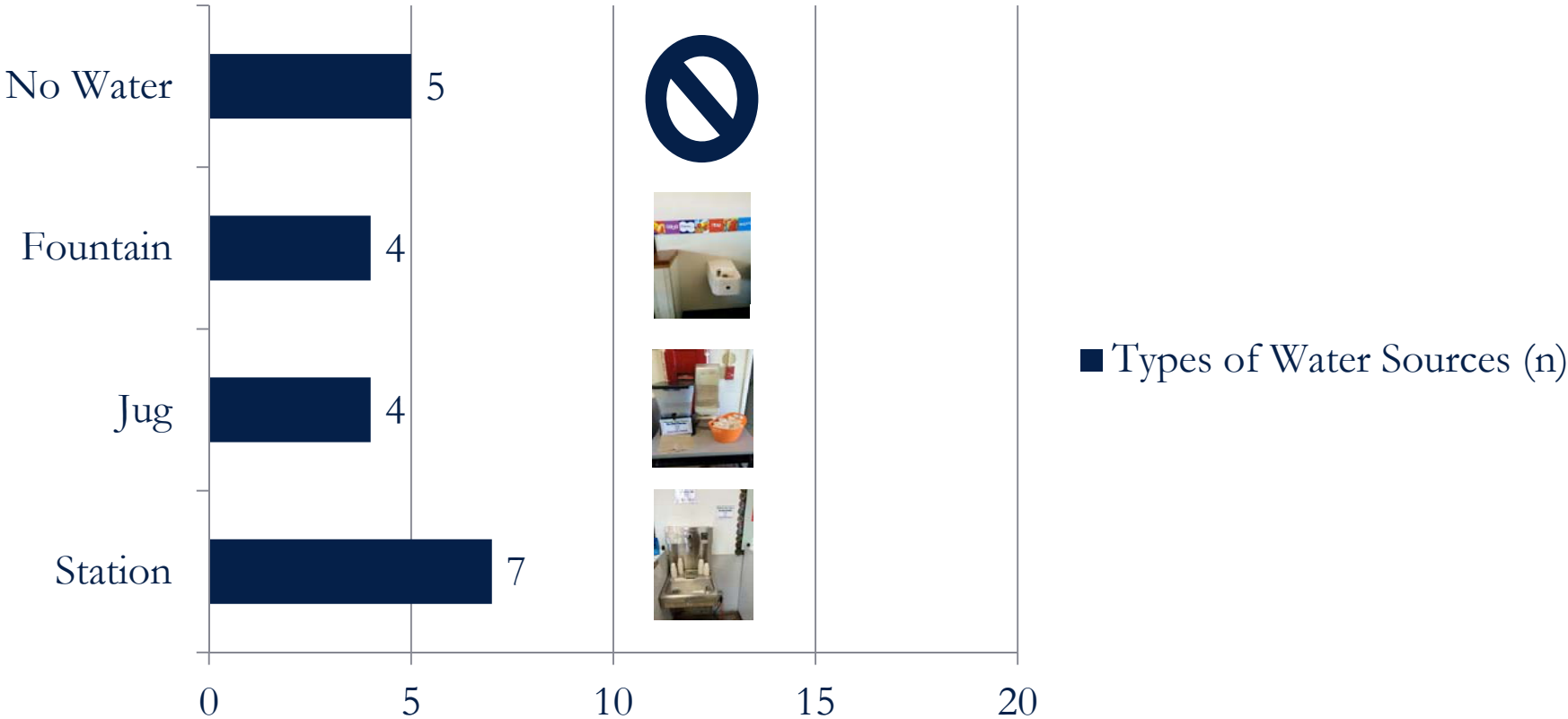
Baseline Results

School Characteristics by Intervention Status

CHARACTERISTIC	INTERVENTION (n=10)	CONTROL (n=10)
Enrollment (mean)	508.5	537.3
Free and Reduced Price Lunch Eligibility	89%	71%
English Language Learners	62%	52%
Race/Ethnicity		
Latino	78%	55%
Asian	17%	34%
African-American	1%	2%
Caucasian	2%	7%
Other	1%	2%

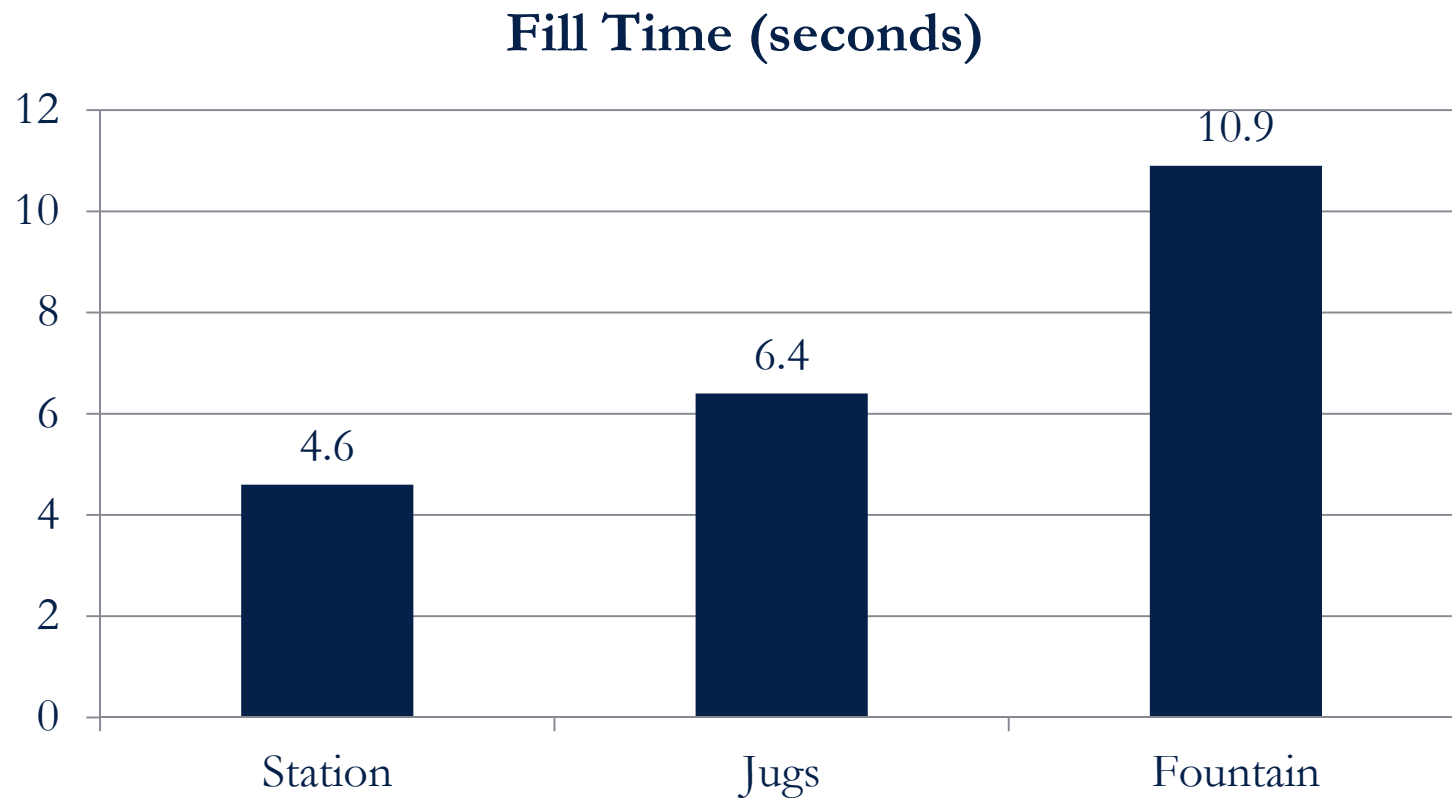
Water Access in Evaluation Schools

N=20

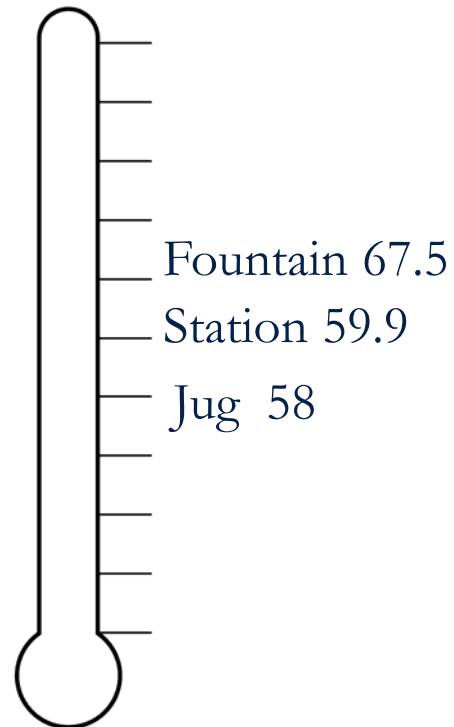


N=5 schools had no water access

Time to Fill a Water Bottle by Water Source in School Cafeterias



Mean Temperature of Cafeteria Water Sources (F°)



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Unappealing Cafeteria Water Access



Provision of Cups

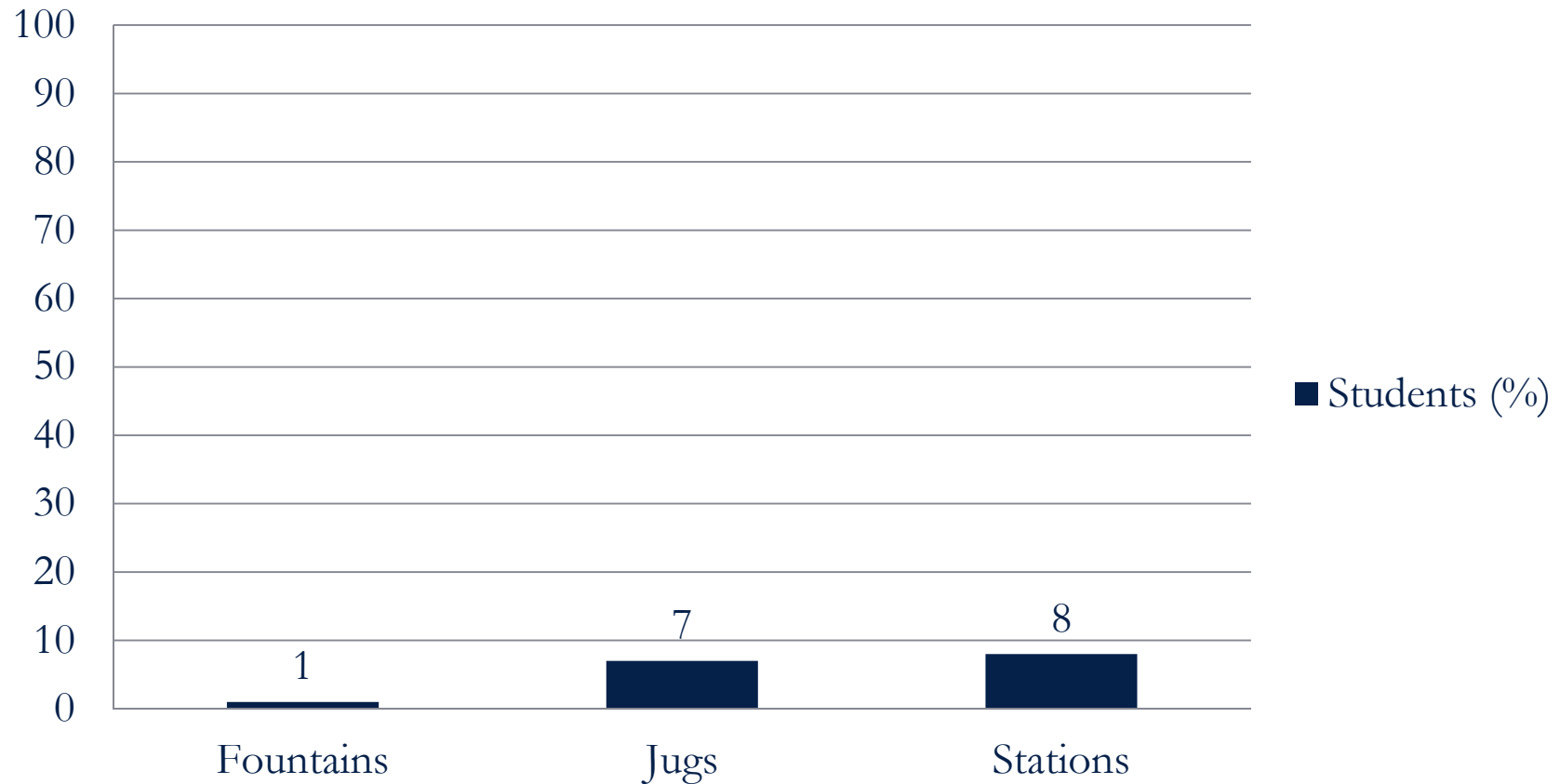


- 8 of 15 schools with cafeteria water access provided cups
- 3-4 ounce paper cups
- Cost covered by food service

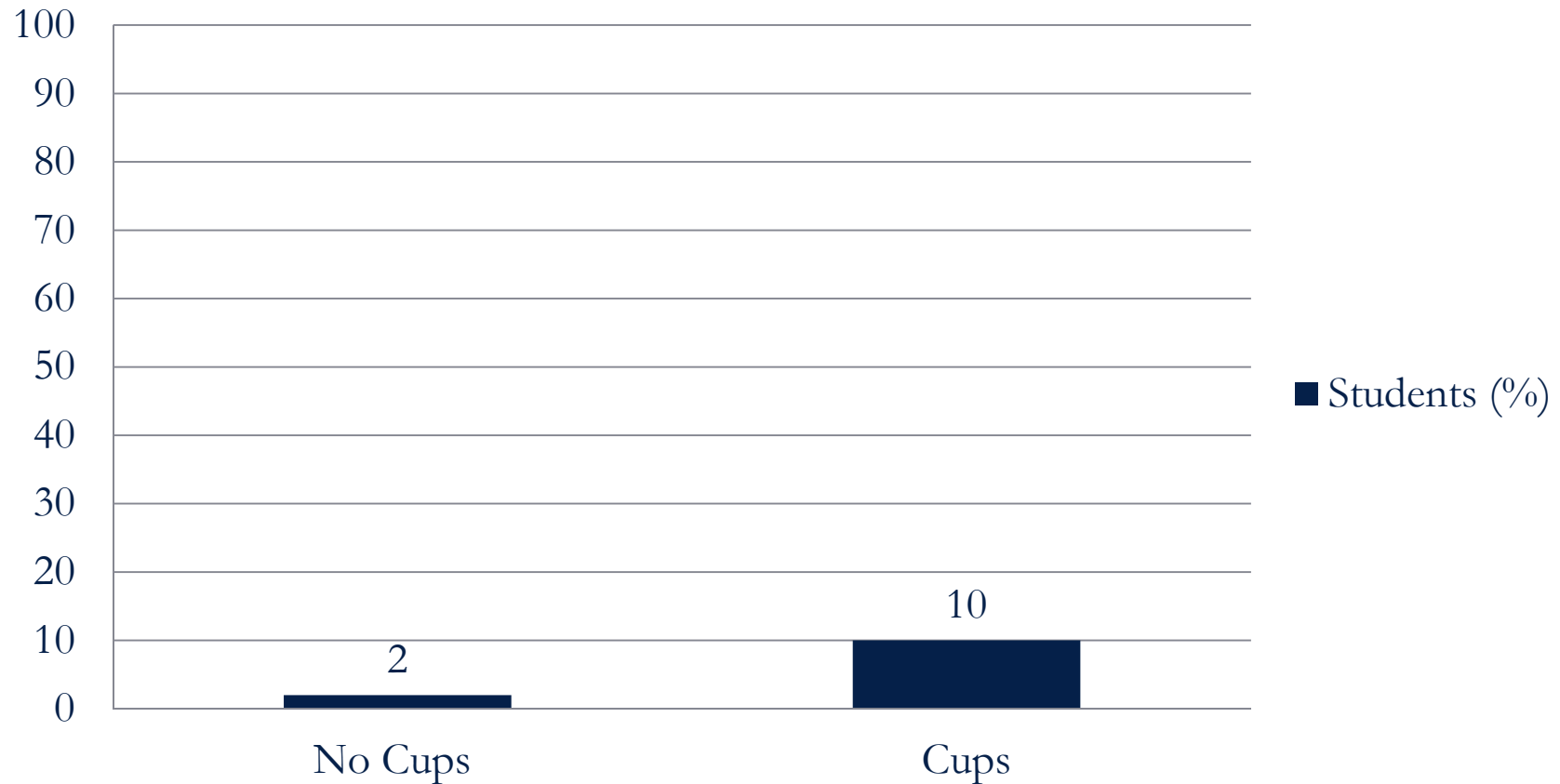
Promotional Signage



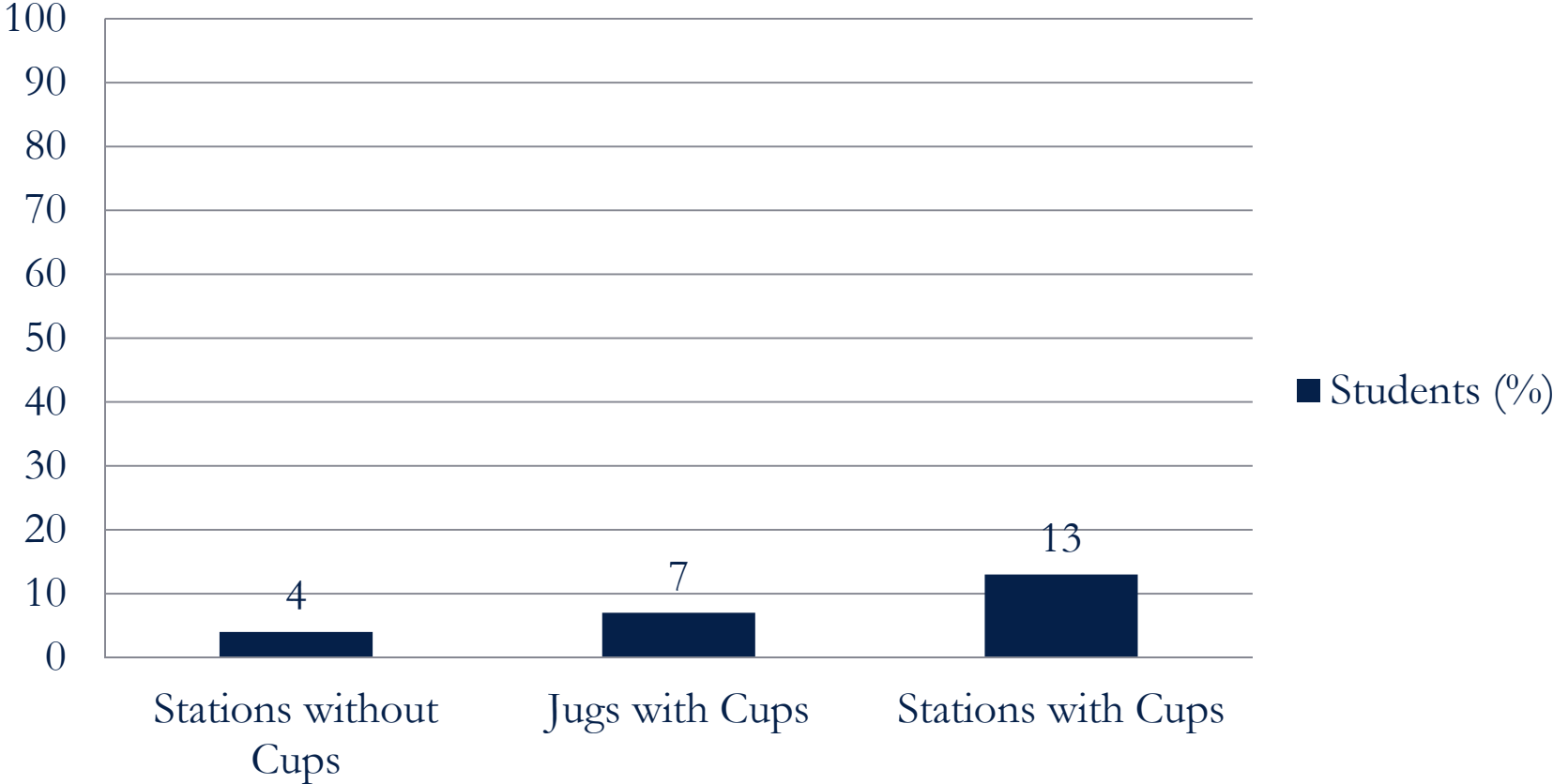
Students Observed Accessing Free Water in School Cafeterias at Lunch



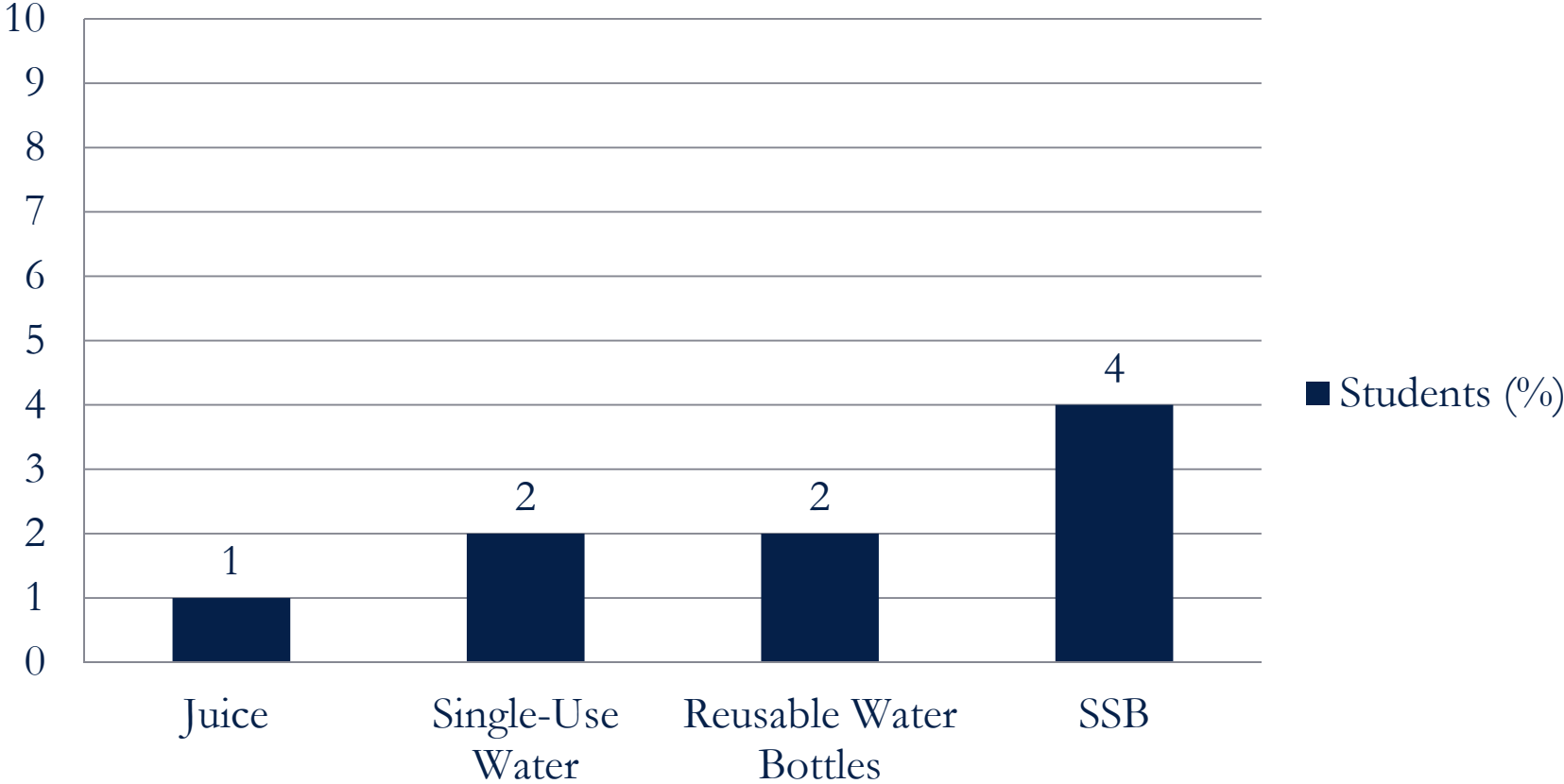
Students Observed Accessing Free Water in School Cafeterias at Lunch



Students Observed Accessing Free Water in School Cafeterias at Lunch



Students Observed Drinking Beverages from Home in Cafeterias at Lunch



Conclusion

Discussion

- Few students drink water in school cafeterias
- Installation of stations improves palatability and intake
 - Improves temperature and water bottle filling time
 - Leads to an 8-fold increase in the percent of students who drink from cafeteria water sources at lunch
- Installation of appealing water sources without cups or reusable water bottles may not sufficiently increase intake
- SSBs are the most common beverages from home

Next Steps

- Examine Water to Go Program's impact on:
 - Intake of water and other beverages among students in child care and elementary schools
 - Teacher and child care provider intake of water and other beverages