



Inexpensive and Time Efficient Hand Hygiene Interventions Increase Elementary School Children's Hand Hygiene Rates

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Health Concerns at Columbia Elementary

Principal's Opinion

Nutrition

Hand washing

Tooth brushing

Play ground safety



Health Concerns at Columbia Elementary

Faculty's Opinion

Hand washing

Tooth brushing

Play ground safety



Hand Washing Chosen
by
Joint Staff Service Committee (JSSC)



What are teachers doing currently?

- 100% of teachers stated they followed the school policy of instructing children to wash before lining up for lunch.
- No formal educational module was part of the teachers curriculum, though 4 teachers did teach some aspects of germ theory.



JSSC hand washing objectives and goal:

1. Increase student knowledge of proper hand washing technique.
 2. Increase rates of student hand washing before lunch.
 3. Develop an effective, inexpensive and time efficient module.
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1. Reduce rate of cold and flu transmission within the school.



Hand Washing Control

Verbal cue only:

“Children wash your hands and line up for lunch.”



Intervention 1:

Verbal cue and modeling:

“Children wash your hands and line up for lunch.”

Teacher walks over to the sink and washes hands.



Intervention 2:

After guest educator session, simulated germ lotion with teacher verbal cue:

“Children wash your hands before lunch; remember, we don’t want germs on our hands when we eat our lunch.”



Observation

- For one week, each teacher tallied:
 - absences
 - rates of hand washing or use of alcohol hand sanitizer
 - with males and females being tallied separately.



Findings:

- Intervention 1, teacher modeling
(0.38 vs. 0.53)($p < 0.01$)
- Intervention 2, education with simulated germ lotion
(0.38 vs. .78)($p < 0.01$)



Males and Females

Males

- Intervention 1: (0.29 vs. 0.51) ($p < 0.01$)
- Intervention 2: (0.29 vs. 0.75) ($p < 0.01$)

Females

- Intervention 1: (0.47 vs. 0.55) ($p = 0.01$)
- Intervention 2: (0.47 vs. 0.82) ($p < 0.01$)



3 Month Post-Intervention

- 78% of children were attempting to wash hands!
- 74% of males, down 1%.
- 82% of females, no change.

Budget for Module 3

Serving 492 Children

Black light	\$21.95
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Simulated Germ lotion	\$41.85
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Wages	<u>\$0.00</u>
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Volunteer labor-1/2 hour per Classroom=8 hrs

Total expenses:	\$63.80
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Summary

- Verbal cue to action combined with teacher modeling education and visual demonstration of the effectiveness of hand washing resulted in an increase in the frequency of hand washing among elementary school aged children.