

2009

Using Card Matching Games to Reinforce Health Concepts at a Public Health Event

George W. Dombi
Wayne State University

Follow this and additional works at: <http://scholarworks.gvsu.edu/mjph>

 Part of the [Public Health Commons](#)

Recommended Citation

Dombi, George W. (2009) "Using Card Matching Games to Reinforce Health Concepts at a Public Health Event," *Michigan Journal of Public Health*: Vol. 3 : Iss. 2 , Article 7.

Available at: <http://scholarworks.gvsu.edu/mjph/vol3/iss2/7>

This Article is brought to you for free and open access by ScholarWorks@GVSU. It has been accepted for inclusion in Michigan Journal of Public Health by an authorized editor of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.

NOTES FROM THE FIELD

Using Card Matching Games to Reinforce Health Concepts at a Public Health Event

George W. Dombi, PhD
Master's Candidate in Public Health, 2009, Wayne State University

OVERVIEW:

Colorectal cancer is the second most common cancer for males and females combined, after lung cancer¹. A diet rich in fruits and vegetables may play a role in colorectal cancer prevention². During March 13-18, 2009, the Colorectal Cancer Awareness Network (CRAN)³ of Southeastern Michigan, in partnership with Get Your Guts in Gear⁴ presented CoCo the Colossal Colon⁵, a 40-foot long, human colon model at the Detroit Science Center, Figure 1. Healthy-food card matching games were played to reinforced the message of fruit and vegetable consumption for good colon health. The goal of this report is to show how to make and use card matching games at a Public Health event.

DESCRIPTION:

Each day of the event had wide spread community involvement. Eight students from Wayne State University, Dietetics Department presented displays and activities on healthy eating. A master's degree candidate, (the author) from Wayne State University, Department of Family Medicine and Public Health Sciences, played healthy-food, card matching games with visitors as part of his practicum experience.

Card Preparation: It was anticipated that many visitors would be children on field trips from local Detroit area schools. A card game was developed on the topic of healthy eating. Cards were constructed using Montessori principles of picture and label matching with build-in control of error⁶. Card images were taken from the National Cancer Institute, Body & Soul health program, developed for African American churches⁷. Images included healthy and vibrant looking African American adults and children.

Control Cards were made by pasting 18 different images plus corresponding labels on card stock 5 x 4 inches. Picture Cards were made using copies of the same 18 images on 4 x 4 inch card stock. Labels were made using only the 18 labels on 1 x 4 inch card stock. When aligned, Picture Cards and Labels approximated Control Cards both in size and information content. All cards were covered with clear, vinyl contact paper for protection, Figure 2.

Picture Matching Games were played with children, 4-5 years old. The author set Control Cards face up on a table. Up to 4 children were given Picture Cards and told to match them to the Control Cards. Next, children were given the Labels and told to match them by placing Labels next to the label portion of the Control Card. Once all the cards were properly matched, all players were given a soft plastic bracelet that said "Prevent Colon Cancer".



Memory Games was played with adults and older children. The author set Control and Picture Cards face down on the table. In turn, players revealed two cards. If they matched, the player proceeded to select two other cards. In the first round, revealed cards were allowed to remain face up until matched as an aid to finish the game in a reasonable time of about 10 minutes. After the first round, all pairs of unmatched cards were then replaced face down. The object of the memory game was to match as many pairs as possible. The player with the most matches was declared the winner and given a bracelet.

Evaluation Tool: Visitors were asked to make a Blue Star Pledge on a paper card with the outline of a blue star. Visitors resolved to change some part of their life to keep their colon healthy. Blue Star pledges were examined to find any relationship to the food card games.

DISCUSSION:

About 150-200 visitors of different ages, races, and genders played card matching games. Children displayed a range of behaviors when asked to play. Some were shy and ran away. Some marched right up and played repeatedly even though they only got one bracelet for all their games. During a game, the author would ask children which fruits or vegetables they didn't like, which would elicit family cross-talk about who was a picky eater.

There were 288 pledges made on the 232 Blue Star pledge cards. Nearly 28% of these promised to "Eat More Fruits and Vegetables".

NEXT STEPS AND KEY FINDINGS:

Matching cards have to be specially prepared for each Public Health event. Making two smaller sets of 12 cards, and using two presenters, would have accommodated more visitors.

Nearly equal in number, more than 75% of the card matching players were children while more than 75% of those who left Blue Star Pledges were adults. A better card matching assessment tool needs to be developed. The tool will have to be short and easy because Science Center visitors hurry on to the next exhibit.



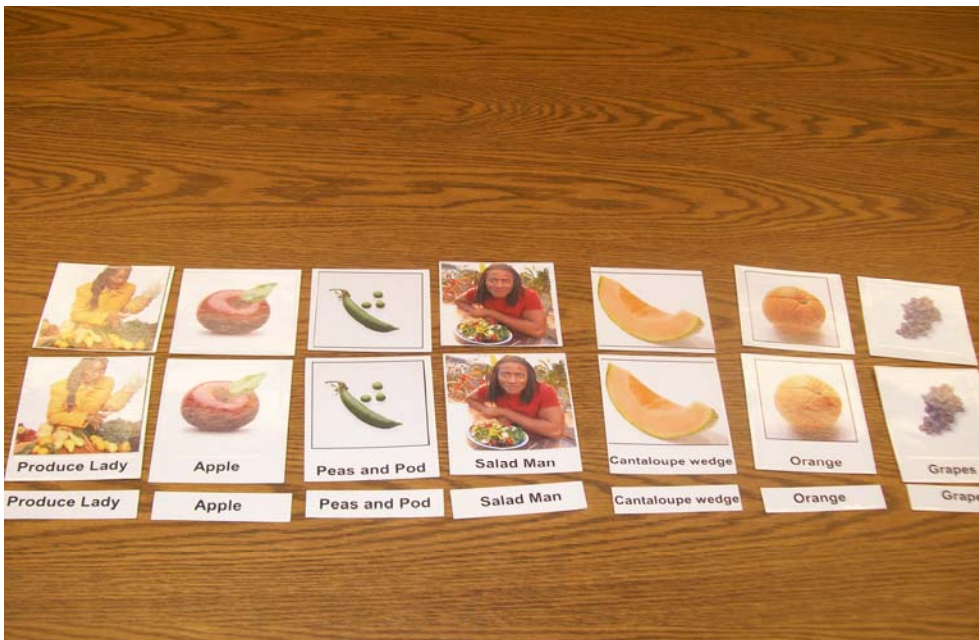
Figure 1:

CoCo, the Colossal Colon® at the Detroit Science Center with a number of elementary school aged visitors waiting to 'cruise' the Colon



Figure 2:

Six healthy-food cards matched both by picture and label. Control cards are in the middle. Picture cards are on top and Labels are at the bottom.



REFERENCES:

- 1) Jemal AJ, Siegel R, Ward E, Hao YP, Xu J, and Thun MJ, **2009**, Cancer statistics, 2009, **CA Cancer Journal for Clinicians**.
<http://caonline.amcancersoc.org/cgi/content/short/caac.20006v2>
Site visited 6/23/2009.
- 2) Van Duijnhoven FJB, Dueno-De-Mesquita HB, Ferrari P, Jenab, M et al, **2009**, Fruit, Vegetables, and Colorectal Cancer Risk: The European Prospective Investigation into Cancer and Nutrition, **Am J Clin Nutr** **89**, 1441-1452.
<http://www.ajcn.org/cgi/content/full/89/5/1441> Site visited 6/23/2009.
- 3) Colorectal Cancer Awareness Network (CRAN) of Southeastern Michigan, All CRAN groups are formed under the leadership of the American Cancer Society, Southeast Michigan contact: American Cancer Society, 20450 Civic Center Drive, Southfield MI 48076.
<http://www.cancer.org/>. Site visited 4/29/2009.
- 4) Get Your Guts in Gear, 593 Vanderbilt Avenue PMB 108, Brooklyn, NY 11238. Sponsors 210 mile bicycle rides to promote awareness of Irritable Bowel Disease and a healthy active life style. <http://www.ibdride.org/>. Site visited 4/29/2009.
- 5) Adirondack Scenic, Inc. 439 County Route 45, Argyle, NY 12809. Original makers of CoCo, the Colossal Colon® which is made of hard plastic. Website set up 2005
<http://www.adkstudios.com/>. Site visited 4/29/2009.
- 6) Montessori Teacher training, Control of error in matching cards.
<http://www.montessoritraining.blogspot.com/2008/05/montessori-nomenclature-cards.html>Control, Written, May 26, 2008. Site visited 4/20/2009.
- 7) National Cancer Institute, Body & Soul is a health program developed for African American churches. http://www.bodyandsoul.nih.gov/resources_bsimagelib_1.shtml Site visited 6/23/2009.
- 8) Channel 2 Fox Morning News pictures of CoCo at the Detroit Science Center, http://www.myfoxdetroit.com/dpp/health/090313_giant_colon/, Written by Deena Centofanti, March 13, 2009. Site visited 4/30/2009.

