# USING NATIVE AMERICAN GAMES TO ENCOURAGE PHYSICAL ACTIVITY IN CHILDREN



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Summer 2004

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## USING NATIVE AMERICAN GAMES TO ENCOURAGE PHYSICAL ACTIVITY IN CHILDREN

#### OVERVIEW OF THE PROJECT GOALS

In response to public health reports pertaining to increasing rates of childhood obesity, the original intent of this project was to compare historical trends in toy purchases to current toy purchases. It was expected that choices would lean towards more sedentary games with present day purchases. The reasons for following a different line of study will be explained in detail at a later point.

The internship portion of the project involved coordinating with the Northview Elementary School's summer school session. Their summer school curriculum focused on Native American culture. I collected information pertaining to traditional Native American games, then gathered natural and recycled material to make usable reproductions of some Native American toys. First I gave a small presentation to the whole group about how each style of toy was used and then the box of toys was made available to the children at recess. They could choose what toys they wanted to play with at will. I made arrangements to accompany them to recess twice a week.

#### PROJECT EXPERIENCE

The experience of the project presented some interesting challenges and interesting opportunities. Viewing the Morse papers from the Kansas State University Archives was particularly surprising. Even though my educational background is in nutrition rather than finance, I found many correlating ideas and views. A number of the articles viewed from the

archives pertained to advertising and insurance. These are also areas of importance as issues about childhood obesity are discussed in the public health arena. Some questions appear to remain the same regardless of what year is noted on a particular article or paper. In 1958 Dr. C. Joseph Clawson addressed the following questions: "1. Does advertising in its current state of development really influence people?" and "4. How good or bad are current developments in advertising and market research... from the standpoint of the consumer's welfare and the healthy progress of business?" Dr. Clawson's article "Is Advertising Boring Into the Consumer's Mind?" is part of the Kansas State University Archives and Manuscripts, Richard L.D. and Marjorie J. Morse Department of Special Collections. (1) In the final summation of The TIME / ABC News Summit on Obesity, (June 06, 2004) Claudia Wallis states that the collection of scientists, businessmen, government officials, community activists and journalists could not agree on the roles of the government in determining legislation for improving the health of the nation; they could not agree on the role of advertising and "whether there should be more regulation of the kinds of food ads American children see." Another point of disagreement concerns the assigning of responsibility for delivering the message of nutrition "to the nation", as well as disagreement on what exact message needs to needs to be sent. (2) Other parallels between current concerns and historical concerns will be discussed during the Outcomes section of this report. Looking through the Richard L. D. and Marjorie J. Morse Department of Special Collections was an unexpected pleasure and an enjoyable part of this project experience.

Other experiences afforded by this project included the challenges of collaborating with the Northview school representatives and the challenge of addressing stereotypes seen as the summer school curriculum and teachers made a good-faith effort to teach about a culture different from their own.

The internship possibility with the Northview Elementary School introduced itself when Sue Mountford, the CLC Coordinator at that school contacted me as the KSU-Native American Association President. Mrs. Mountford was looking for some traditional Native American dancers who could perform for her students. When I responded to her request, I told her, K-State did not have dancers available at this time, but if we could meet we might be able to figure out an alternative activity. I also made myself available as a resource or consultant regarding Native American culture. I made it clear that I was not an expert of any kind when it came to all Native American tribes, but whatever I do know I was willing to share. After meeting with Mrs. Mountford, we agreed that my involvement would center on Native American games that the children could participate in during their recess.

Following through on this collaborative effort was a considerable challenge as communication lines became twisted around summer trips or vacations. Once the summer school was underway contact was reestablished. I did give a small presentation to the group of students introducing the various toys. My stepdaughter and stepson helped with this initial demonstration. I started by demonstrating "hoop and pole"—an exercise in practicing with a pretend spear and a rolling hoop. Next was the "ring and pin"—this is played with a small hoop that has a stick tied to it. The ring is tossed into the air and the child attempts to poke the stick through the decorative binding in the ring. For this project I used simple designs within both the hoop and the ring for both of these games. The "ring and pin" game is likened to the English version of cup and ball where a ball is attached to a wooden cup and the ball is tossed up so the child can try to catch it in the cup. (3) Plastic scooped rackets were provided as toys that could be played with in a manner similar to lacrosse. Shuttlecock birdies made from cornhusks and assorted feathers were used to play an informal version of badminton. The grade school children

were more familiar with the game badminton as opposed to the term shuttlecock. To demonstrate this game we use our hands as the rackets. The birdies or shuttlecocks I provided looked quite worn by the end of the month. This appeared to be a well-liked toy. I also demonstrated a buzz toy made from a button and a string. Traditionally the buttons or equivalents were made from bone, wood or antler. The last activity I demonstrated is commonly called "cat's—cradle". This is done with a string and various hand movements to create different designs. Some tribes use these string designs to relay stories and myths.

Appendix A contains the outline provided to the teachers listing the different games.

For the internship, I accompanied the children out to recess twice a week. Within the presentation given to introduce Native American games it was mentioned that many simple playtime activities could be considered universal. Children all over the world play their own versions of tag, hide-n-seek or crack-the-whip. Lots of children spend time running foot races or doing relay races. Mrs. Mountford indicated that possibly the teachers could arrange groups for races during recess, but I did not see that take place. For this experience, my recess was spent trying to answer the questions presented by the children milling around the toy box. I helped to roll the hoop for the hoop and pole activity; I participated in games of shuttlecock and gave demonstrations of some cat's—cradle figures. While not all of the activities had the element of physical activity hoped for (like the buzz toy and the cat's-cradle) these activities did encourage hand-eye coordination and practice in sharing toys.

Appendix B contains pictures of the toys utilized during the internship and has more detail listed regarding the material used and the description of the playtime activity.

Overall the experience of the project was decidedly positive. Learning the importance of maintaining good communication lines when collaborating with other departments, other

organizations and with people from other ethnic or cultural backgrounds is something that will be of value in many life and career experiences. This project gave me the opportunity to interact with children and the school system. While my dietetic interest is not in the pediatric field, Connie Evers, M.S., R.D., a Nutrition Education Consultant and speaker at the Childhood Obesity: Causes & Prevention Symposium Proceedings speaks about the importance of teaching children about good nutrition. Evers states "Nutritious meals plus education equals healthy kids." (4) On this point the Centers for Disease Control, the American Dietetic Association and the USDA Center for Nutrition Policy and Promotion agree. They would like to see nutrition and health education create healthy children, healthy families and eventually a healthy nation. In a 1955 speech titled "Working Mothers of Young Children" Richard L.D. Morse echoed a similar sentiment when he stated "What is good for the family is good for the nation." (5)

This scholarship has given me the opportunity to define possible avenues of specialization for the future in my career. I would definitely encourage other students to take advantage of the opportunities provided by the Marjorie J. and Richard L.D. Morse Family and Community Public Policy Scholarship.

#### **OUTCOMES OF THE SCHOLAR PROGRAM**

The overview of the project goals indicates there were some changes to the original research subject mentioned in the scholarship application. Determining trends in toy purchases proved to be quite involved and appeared to require more time than what the summer project would allow. But as I reviewed current information pertaining to the prevention and treatment of childhood obesity, it was amazing to see how some ideas covered in the Richard L.D. Morse Papers continue to be social problems that correspond to public policy concerns with childhood

obesity. One comment attributed to Kyrk (1953) from within Helen Sederstrom Barney's paper on "Food Shopping Practices of Selected Low-Income Families, Riley County, Kansas 1965 seems to sum up the changes public health representatives would like to see pertaining to a healthy living perspective. The Kyrk quote is as follows: "consumer education programs attempt to help families buy economically, but to be fully effective they must change, modify or strengthen the family's concept of needs, desires, tastes and attitudes." (6) This same quote could be directed toward changes in attitudes regarding food quality and physical activity. (Barney's paper is from the Kansas State University Archives and Manuscripts, Richard L.D. and Marjorie J. Morse Department of Special Collections) Regardless of what kind of nutrition education is presented to families, until their concept of what food they need, what food they desire or what tastes they have acquired and what attitudes they have towards nutritious food and physical activity change we will not see a change in the obesity epidemic. These comments address individual change as a part of preventing and treating obesity.

I am using comments and information from The Time/ABC News Obesity Summit because this Summit gathered professionals to speak about some of the most recent conclusions and suggestions seen in the health field. James Tillotson, Professor of Food Policy, from the Friedman School of Nutrition Science and Policy, Tufts University, used a three part model in his presentation "10 things Washington Should Consider!" In his presentation he indicated obesity is a product of "multi-dimensional and multi-layered" causes. The food supply is the middle layer in his circular model. Environment is the outer layer and the Individual is the center of the model. The Food Industries' Role is addressed within the food supply layer. The Food Industries' Role includes the development of food products, the distribution methods and marketing methods or advertising.(7) Advertising plays a controversial role in childhood obesity

and some factions believe that more regulation should be returned to children's programming on television. Marion Nestle, Author of the book "Food Politics" and Professor and Chair of the Department of Nutrition, Food Studies, and Public Health, New York University believes advertising adversely effects the food choices of young children. (8) Mary Gardiner Jones, commissioner of the Federal Trade Commission has a paper titled "What's Right for the Consumer?" (This is from the Kansas State University Archives and Manuscripts, Richard L.D. and Marjorie J. Morse Department of Special Collections) This paper was presented before the Insurance Advertising Conference in Montreal, Canada during 1971. On several levels this paper touches on present day concerns with responsibilities in advertising. Jones refers to an article in the Harvard Business Review by Greyser and Reece "Businessmen Look Hard At Advertising." She draws on a direct quote that states: "...an advertiser could focus on what's right for the consumer..." After this quote Jones states "I suppose if we have learned one thing about the constantly shrinking world in which we live today, it is that the instant communications technology which characterizes it is increasingly making us our brother's keeper."(9) While this quote was directed towards insurance salesmen, it appears some people believe it should apply to our fast food industry as well. This idea of who is responsible for an individual's health brings obesity concerns around to a legislative angle.

When I first heard about some of the lawsuits being directed towards the McDonalds fast food chain, I shuddered at the thought of what people are expecting from the fast food industry. With tongue-in-cheek, I wondered if the fast food industry will need to train technicians who can administer blood glucose tests or do a cholesterol check before allowing a customer to order. I feel like these same people who say their health problems are caused by someone else would be

the last people who would want to listen if McDonalds were to tell them..."Your BMI is too high, you will only be allowed to order the salads with water or a diet drink."

As I see the same social problems being addressed during the 1960's and still being addressed now, it becomes evident that the best we can do is make small changes within the circle of our own contacts. That is what I accomplished with my interaction with the school children. I was able to use my cultural heritage as a starting point to encourage a specific group of children to try some different types of games. This gave them another reason to look forward to recess, and a reason to try something different for physical activity. This summer internship and project has reinforced my interest in nutrition education and strengthened my interest in getting a degree in exercise science. While public policy does require commitment from people who work in political circles, public policy is only effective if there are people available on the community level who can administer federal programs to the target population. I see myself as a person who can work with passion on a community level to help the target population one person at a time.

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## Appendix A



## Native American Games

- Some of these games are <u>Universal</u> games. In this case, universal means <u>CHILDREN ALL</u> <u>OVER THE WORLD</u> play these same types of games.
- The games I list will be divided into three categories:
  - Low Activity
  - Medium Activity
  - High Activity



## Low Activity games

- 1. Cat's cradle string play
- 2. Playing house playing with small dishes and dolls.
- 3. Play at hunting or tracking-playing with small bows & arrows or small spears.
- 4. Top spinning.
- 5. Ring and Pin same as cup and ball.
- 6. Jackstraws same as pick-up-sticks
- 7. Buzz toys



## Games of Chance and Guessing Games

- 1. Dice
- 2. Stick games
- 3. Hand game
- 4. Moccasin or Hidden-Ball game



## Medium Activity Games

- 1. Shuttlecock like badminton
- 2. Swinging
- 3. Using stilts
- 4. Hoop and Pole
- 5. Snow snake
- 6. Juggling



## High Activity games

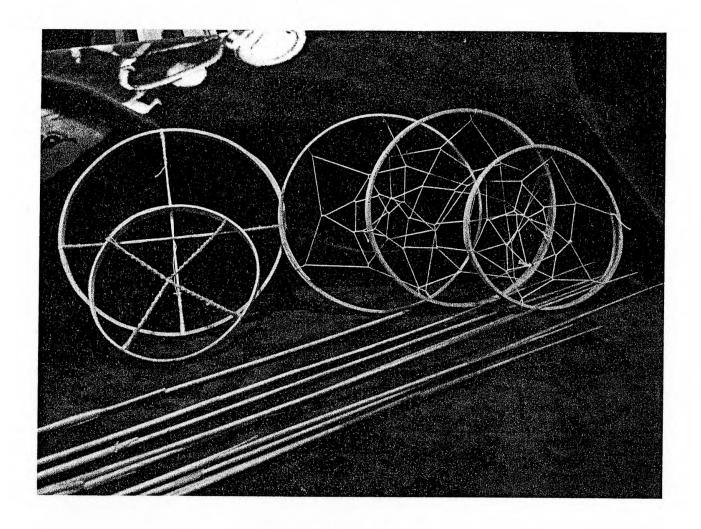
- 1. Foot Races
- 2. Relay Races
- 3. Various Ball Games Lacrosse or Stickball
  - Ball race-similar to soccer
  - Double Ball
  - Different versions of football
  - Pitch, toss and catch similar to volleyball
- 4. Crack the whip
- 5. Tag



## **Additional Comments**

- The highlighted activities are ones that I have a few supplies for and I can bring these to the school.
- I have four plastic scoop-type rackets that a few children can use for a lacrosse type game.
- Foot races, relay races, tag and crack the whip are all games anyone can play without too much instruction.
- Have fun! And remember that children all over the world play in some of the same ways.

## Appendix B



#### Hoop and Pole

Hoop and pole is the children's version of spear practice.

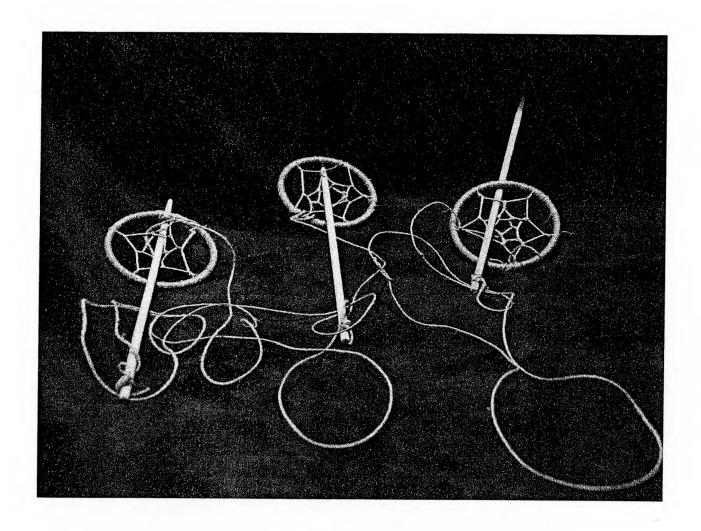
For pretend spears I gathered old cattail canes. They were not perfect, but they were replaceable and not expensive.

The hoops are recycled basket hoops. I found them as part of an old macramé plant hanger. I disassembled the plant hanger to use just the hoops.

The string designs in the hoops are done with crochet thread and simple dream catcher type knots. The orange thread is some kind of embroidery thread that I just had on hand. On the larger hoop I used a simple weaving technique to stabilize the loops of thread that are creating the cross in the middle. In the smaller hoop I used a macramé knot to stabilize the thread crossing in the middle.

To play with the hoop and pole, one child would roll the hoop in front of another child or a group of children while they throw the "spear" at the hoop.

The children were definitely energetic in trying to master this game.



### Ring and Pin

Ring and Pin was the female version of Hoop and pole.

Traditionally all kinds of objects could be used to replace the ring used here. With some tribes even small animal skulls were used in place of the ring. With other tribes grasses were bound together and this was stabbed with a sharper pin than what I am using here.

For this situation I used some metal rings leftover from a dream catcher demonstration. They are covered in jute type cord and the design in the middle is large and uneven on purpose so that the children could catch the ring more easily.

For the pin part of this game I used chopsticks. I tied the cord to the chopstick and to the ring. To play this game the ring is tossed in the air or swung in an arc at the end of the cord. While the ring is falling the child jabs at it with the pin to catch the ring.

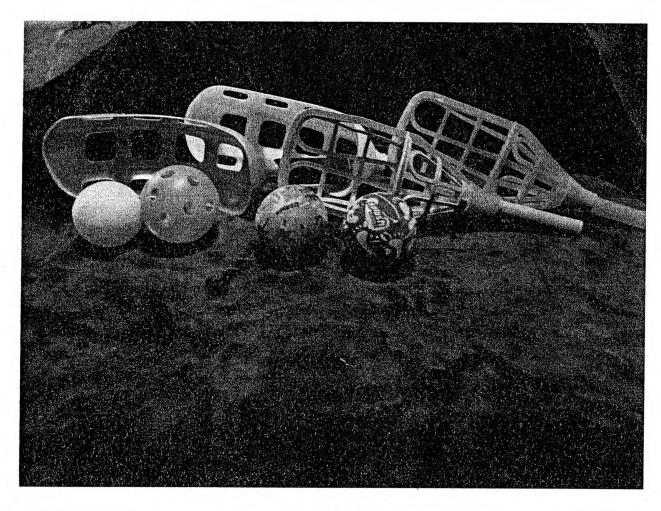


#### Shuttlecock

Folding dried cornhusks into a small package and tying it with a cord makes these birdies. The feathers are glued into the top.

These took a couple of days to make. First the cornhusks had to be softened in warm water so that they are pliable. I used about three husks for each birdie. The first husk is just folded into a square or rectangle. The second husk is folded around the first to make the a little larger. The third husk is gathered up around the square or rectangle and tied to create the vertical folds. After the birdie is shaped, then it must dry before the feathers can be glued on. After the feathers are glued on, the glue must be allowed to dry before the games can begin.

For the shuttlecock games we kept the rules simple. Whoever wanted to play would join in and use their hands to bat at the shuttlecock to keep it airborne. Teams could be formed and the winner would just be whichever side kept the shuttlecock in the air the longest.

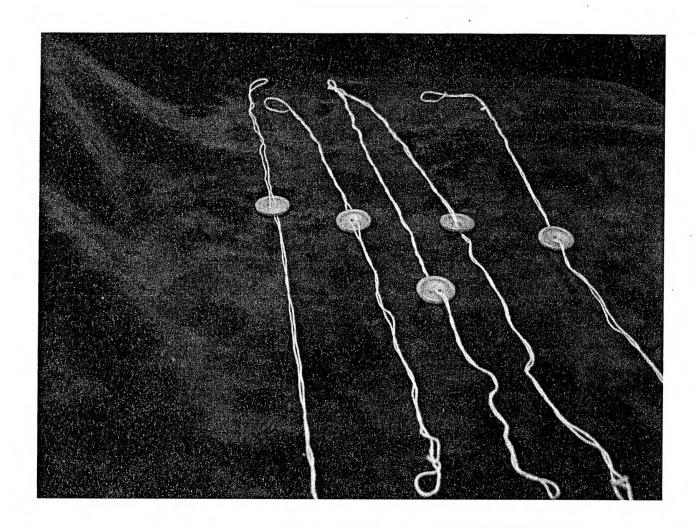


#### Lacrosse

These are the toys I provided for lacrosse type play.

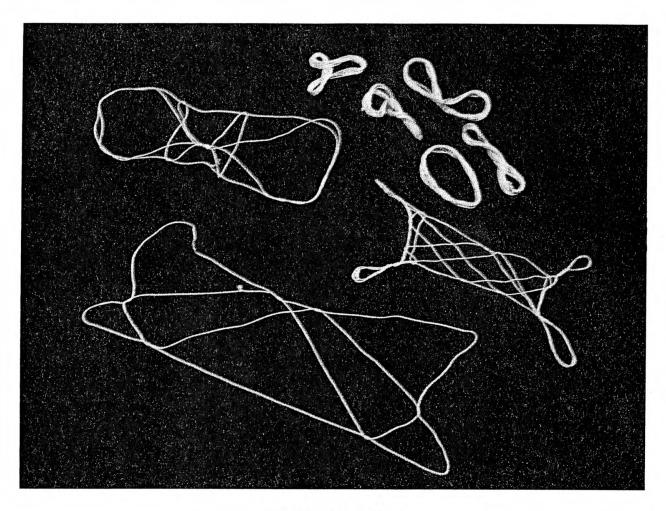
I was concerned with student safety and chose not to make any kind of homemade lacrosse sticks. These toys gave the same feel of throwing and catching the ball without much chance for injury.

Since this game requires a little more skill, no rules were reviewed. The children would play catch and spent more time running after the ball then using the scoops to catch the ball.



## **Buzz** Toys

These buzz toys are simply made with old buttons and a loop of crochet thread. Traditionally the button equivalents could be made from bone, shell, wood or antler. To play with a buzz toy a child would hold put one hand in each end loop of thread. The button is positioned at the midpoint between your hands. As the child pulls and relaxes the thread the button begins to spin twisting the thread on each side. As the toy is pulled and slightly released the button creates a buzzing noise.



#### Cat's Cradle

The heavier loops in the upper right are just looped strings that are not in use.

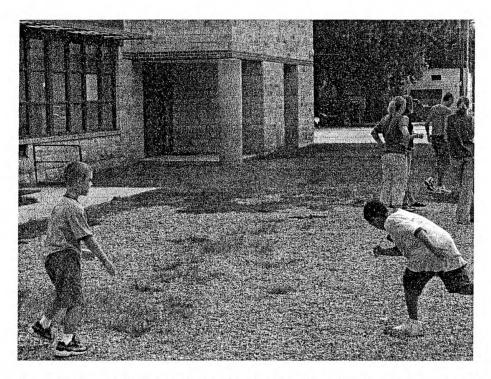
On the upper left is the figure I was taught to identify as a butterfly.

The lower right figure is considered a Navajo rug or sometimes called an Apache door.

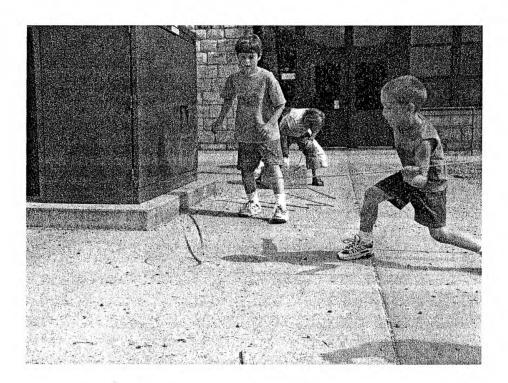
The lower left figure is one I was taught to call two stars, it is part of a series that shows one star up through four stars and then jumps to an elaborate figure called many stars.

With the Navajo these string figures were used to tell stories and it was considered appropriate to only tell these stories during the winter. It is considered taboo to play this way during any other time of the year.

In non-Native settings I had learned that cat's cradle was a game played with two or more people. A specific pattern was developed and then the children took turns picking up the pattern from one child to another in such a way that the existing pattern changed each time the string changed hands. I only know about 6 steps or variations with that version of cat's cradle. I have heard of some people who know 10 or more variations. I would like to learn more of these variations.



These boys are playing with the shuttlecock. The shuttlecock was hard to see against the light background.



This is showing boys playing hoop and pole.