

1 **CAMINITOS COLLABORATIVE: A MOVEMENT PROGRAM IN A CULTURALLY DIVERSE COMMUNITY**

Jennifer Ahrens
Michelle Hamilton
Ting Liu
Texas State University
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2 **Today's Overview**

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4 **Who is involved?**

- Faculty and graduate students from HHP
- Faculty and graduate students from C&I
- Faculty and graduate students from FCS
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- Total 6 Faculty members
- One Retired Early childhood coordinator
- 14 graduate students (9 regular, 5 part time)

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6 **VIDEO-MVMT PROGRAM**

7 **While Pre-Testing is happening....**

- All children participate in the same types of activities
 - 2 classes (35-40 children total)
 - 4 stations
 - 5:20 at each station
 - Holiday themed days
 - 2 Spanish speaking classes
 - 1 inclusion class
- Sustained activities
- Cross-curricular activities
- Try to avoid activities that may interact with testing
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8 **After Pre-Testing Has Commenced...**

- 1 Intervention: 8:10 am -10:55 am
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 - Bounce the ball to target
 - Gallop to the number
 - Skip to the letter
 - Forward rolls
 - Kick through the hula hoop

- Push ups/sit ups
- T-Throws to target
- Jump Twist
- Red Light Green Light (stop within 2 steps)

3 Control: 10:55 am-2:20 pm

4 • YMCA, Monster Mash, Monkeys

- Bumble Bee Bop
- Snowman Tag
- Rainbow Run
- Find That hoop!
- Balloon Bounce
- Parachutes and Rockets
- Hungry Hippos
- Mr. Fox
- Number Match
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9 **Intervention vs Control**

- Intervention based on testing results
- Peabody test breaks skills down in different categories:
 - Locomotion: hopping, Jumping, skipping, galloping, running, walking backwards, etc....
 - Object manipulation and control: Throwing, bouncing a tennis ball to a target from different locations, 1-handed and 2-handed catching, kicking etc....
 - Stational skills: standing on 1 foot, standing on tip toes, rolling forward, push-ups, sit-ups, imitating movements
 - Fine Motor: Stringing beads, cutting paper, building blocks, drawing shapes, buttoning a button, folding paper etc...
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10 **Sample Lesson plan**

Intervention Group

11 **Sample Lesson Plan**

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- University Course- Motor Development
- Graduate Assistants

13 **Additional Program Highlights**

- Science, Math and Health nights
- Teacher In-service meetings
- Literacy Component
- University Service-Learning

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14 **Two types of Research**

- Assessment-Based Research
 - Gross motor skills
 - Fine motor skills
 - BMI
 - Nutrition Knowledge
- Intervention-Based Research
 - Fine and gross motor skills
 - Types of instruction
 - School readiness integrated into motor skill instruction
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16 **1) TGMD-2, 2) MABC-2, 3) PEABODY-2**

POPE, LIU, & GETCHELL (2011)

LIU, HAMILTON, & SMITH, S. (IN REVIEW)

LIU, HOFFMANN, & HAMILTON (IN REVIEW)

17 **Test of Gross Motor Development-2 (TGMD-2)**

- Many researchers used TGMD-2 to assess pre-k children's gross motor performance (Goodway et al., 2003; Hamilton et al., 1999; Pope et al., 2011)

18 **Movement Assessment Battery for Children-2 (MABC-2)**

MABC-2 assesses both fine and gross motor skills in three different categories: manual dexterity, aiming and catching, and balance (Henderson et al., 2007; Liu et al., in review).

19 **Peabody Developmental Movement Scales-2 (PDMS-2).**

PDMS-2 assesses children's fundamental motor skills from birth to five years of age (Folio & Fewell, 2000; Liu et al., in review).

20 **Pre-test results on PDMS-2**

- 106 low SES preschool children (80% Hispanic) were assessed on PDMS-2
- A pre-test was administered at the beginning of the fall semester to exam the PDMS-2 performance
- About 35% children were classified as below average.

21 **Intervention (15-week)**

- A week after the pre-test, the children in experimental and control group went through 20 minutes motor activity sessions for 15 weeks.
- The lesson plans were specifically designed to target stationary, locomotion, and object

manipulation skills for the children in the experimental group.

22 **Intervention**

- The children in the control group also experienced same 15 weeks of 20 minutes physical activity sessions but without the new lesson plans.
- A post-test was administered using PDMS-2 after children's 15 week intervention sessions.
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23 **Results**

24 **1) LESSON PLAN, 2) CLEAR INSTRUCTIONS
3) POSITIVE FEEDBACK, AND 4) PRACTICE**

25 **Lesson Plan**

- Have the lesson plans ready before each intervention session

26 **Clear Instructions**

- Demonstrate the task, give clear instructions. If needed, physically guide the child through the movement

27 **Positive Feedback**

- Positive feedback can motivate a child to try the skills again.

28 **Practice**

- Children need to practice the intervention tasks frequently

29 **Take Home Messages**

Physical educators are encouraged to :

1. Apply appropriate verbal instructions along with visual supports
2. Provide positive feedback
3. Limit distractions in the environment
4. Use required equipment so the results are as accurate and reliable as possible.
5. Use lesson plans specifically designed for intervention

30 **Resources**

- www.pecentral.com
- Goodway, J. D., & Branta, C. F. (2003). Influence of a motor skill intervention on fundamental motor skill development of disadvantaged preschool children. *Research Quarterly for Exercise and Sport, 74*(1), 36-46.
- Goodway, J. D., Robinson, L. E., & Crowe, H. (2010). Developmental delays in fundamental motor skills of ethnically diverse preschoolers. *Research Quarterly for Exercise & Sport, 81*, 17-25.
- Goodway, J. D., & Rudisill, M. E. (1996). Influence of a motor skill intervention program on perceived competence of at-risk African American preschoolers. *Adapted Physical Activity Quarterly, 13*, 288-301.
- Hamilton, M, Goodway, J. D., & Haubensttricker (1999). Parent-assisted instruction in a

motor skill program for at-risk preschool children. *Adapted Physical Activity Quarterly*, 16, 415-426.

- Pope, M., Liu, T., & Getchell, N. (2011). Object-control skills of Hispanic children enrolled in Head Start. *Perceptual and Motor Skills*, 112 (1), 193-200.

31  **QUESTIONS?**