Let's Inspire Innovation 'N Kids
The Effects of Play and Character Development on Classroom Behaviors in K-2 Children

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Our mission is to bridge the gap between academics and social, emotional, and healthy well-being. The Liink Project aims to develop the whole child through increased recess and character development.
Liink Team

Leadership Team

- Dr. Debbie Rhea, Project Director
- Dr. Kathy Cammarata, Project Coordinator
- Alex Rivchun, Project Manager
- Dr. Michelle Bauml, COE Play Consultant
- Dr. Stephanie Jevas, Burnout Consultant
- Dr. Jackie Pennings, Stats Consultant
- Carol Bollinger, Field Associate

Student Team

- Graduate
  - Laura Clark
- Undergraduate
  - Sami Gothberg
  - Diana Schwene
  - Katie Trolinder
  - Mille Nichols
Liink Implementation

Teacher & Admin. Training

- Character Development (PA)
- Recess
PLAY

UNSTRUCTURED
OUTSIDE - 3-4 Daily Recesses
15 minutes each
CHARACTER DEVELOPMENT

- CULTURAL ENVIRONMENTAL INFLUENCES
- SOCIAL SITUATION-CONTEXT INFLUENCES
- INTRAPERSONAL INFLUENCES
Positive Action Kit (K)
Positive Action with Kinder
## Teacher/Administrator Training Schedule

<table>
<thead>
<tr>
<th>Training Day</th>
<th>Training Date</th>
<th>Training Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January, 2015 (full day)</td>
<td>Philosophy/Mindset/ Project</td>
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<tr>
<td>2</td>
<td>Feb (full day)</td>
<td>Play/Creativity/Recess &amp; Positive Action</td>
</tr>
<tr>
<td>3</td>
<td>Mar/Apr (after school)</td>
<td>The intervention &amp; teacher role</td>
</tr>
<tr>
<td>4</td>
<td>Apr/May (after school if needed)</td>
<td>The intervention &amp; teacher role</td>
</tr>
<tr>
<td>5</td>
<td>End of School year – (full day)</td>
<td>Integrating recess &amp; positive action; Assessments; Creativity; Development</td>
</tr>
<tr>
<td>6</td>
<td>August, 2015</td>
<td>Begin intervention; ongoing training this semester</td>
</tr>
</tbody>
</table>
Research Questions

Research Question 1: Will three-15 minute recess/unstructured play times daily result in improved: classroom focus, listening skills, and decreased: off-task/discipline issues?

Research Question 2: Were the children able to recognize elements taught in the character development curriculum and transfer those elements to positive behaviors in recess and the classroom?
Liink Project (formerly Project ISIS) 2013-2014

- Initial Pilot: Two Private Schools in Fort Worth
- K-1 baseline data collection Fall, 2013
- Launched Liink January 6, 2014
- Recess
- Character Development (PA)
Participants

- K and 1 students (N=126; K = 63; 1 = 63)
- 32 males and 31 females in kindergarten
- 26 males and 37 females in first grade

Students were used as their own controls for this first year. Baseline data was collected in the fall and intervention data was collected in the spring.
Schedule of Recesses

- School started 8:15
- Announcements until 8:25
- Class began 8:25 ish – 9:20
- **Recess 1:** 9:20 – 9:35
- Class again
- **Recess 2:** 10:30-10:45
- Lunch
- **Recess 3:** 2:00-2:15
- School out: 3:00

- School starts 8:15
- Announcements until 8:25
- Content 8:25 ish – 9:05
- **Recess 1:** 9:05-9:20
- Content (9:20-10:20)
- **Recess 2:** 10:20-10:35
- Lunch (10:35-11:05)
- Content (physical education & another co-curricular daily)
- **Recess 3:** 12:40-12:55
- Content
- **Recess 4:** 2:00-2:15
- Content
- School out: 3:00
Measures

- Absenteeism
- Height & weight changes (CDC Adolescent BMI)
- Listening Assessment
- Classroom & recess behavior observations
- Positive Action surveys (teachers & students)
- Math, science, and reading assessments
Level One

1. The farmer went into the barn. The cows were waiting for him. He got a bucket and started to get milk.

   1. Where did you picture the farmer?
   2. Who did you picture the cows waiting for?
   3. Why do you think the cows were “waiting” for the farmer?
   4. What would be a good title for this story?

   three sentences

2. The little blue egg was in the nest. Soon there was a crack in the egg. A baby bird without feathers popped out of the egg. “Peep. Peep.”

   1. What color did you picture the little egg?
   2. Where did you picture the egg?
   3. What did you picture popping out of the egg?
   4. Why do you think the baby bird didn't have feathers when it came out?
   5. What color bird do you think it will be when it grows up? Why?
   6. What is a good title for this story?

   four sentences
Classroom Observation Modified STROBE

Recess Observation

- Time to and from classroom
- Weather
- Student Interactions
- Creative Behaviors
- Problem Solving
- Conflict Resolution
Positive Action Survey

- **School Connectedness:**
  - I enjoy coming to school.
  - I am proud to be a student at my school.
  - I feel like I belong at my school.

- **Prosocial:**
  - I play nicely with others.
  - I treat my friends the way I like to be treated.
  - I am a good friend to others.
  - I am nice to kids who are different than me.

- **Respect for adults:**
  - I speak politely to my teacher.
  - I listen when my parents are talking.

- **Honesty:**
  - I say I’m sorry when I have done something wrong.
  - I tell the truth.
  - I admit when I’m wrong.

- **Children’s Empathy:**
  - If you were mean to someone, would you feel bad about it later.
  - I understand how other kids feel.
  - When I see someone who is happy, I feel happy too.

- **Bullying:**
  - I tease kids at school.
  - I push, shove, or hit kids from school.
  - I call a kid at school a bad name.

Liink Results
Classroom Observations

- Off-Task Moving (p < .001): 9% (Beginning) vs. 3% (End)
- Off-Task Stationary (p < .001): 25% (Beginning) vs. 8% (End)
- Off-Task Vocal (p = .001): 11% (Beginning) vs. 6% (End)
- Off-Task Low Tone (p = .003): 7% (Beginning) vs. 2% (End)

Note. Beginning of year N = 19; End of year N = 17.
Note. Beginning of year K (N = 10), 1st (N = 9); End of year K (N = 7), 1st (N = 10).
Better Decision Makers
Exploration of ability
The Liink Project: Public Schools 2014-2016

- Continue working with two private schools—added control schools
- Identify public schools: pilot project (Spring, 2015)
- K & 1 Teacher & Administrator training for public schools—Spring, 2015
- Teach 2-3 Positive Action lessons at the end of Spring, 2015 semester
- Launch Liink Project grades K & 1 Fall, 2015 (four recesses daily, three 15-minute positive action lessons weekly)
- Continue intervention, training, & feedback—Spring, 2016
- Submit Institute of Education Sciences Grant—Fall, 2015
'14-'15 Preliminary Results
Setting A

Classroom Behaviors

<table>
<thead>
<tr>
<th>Type of Behavior</th>
<th>Intervention</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>APR</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>OTS</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>OTM</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>OTV</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>OTLT</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>INAP</td>
<td>0.5</td>
<td>0.6</td>
</tr>
</tbody>
</table>
’14–’15 Preliminary Results
Setting B

Classroom Behaviors

- APR
- OTS
- OTM
- OTV
- OTLT
- INAP

Behavior Proportion

Chart Area

- Intervention
- Control

Type of Behavior
Liink Future Directions

- Continuing to add grade levels in current schools
- Moving into public schools
- Further developing uniform training programs on the importance of recess and character development as well as maintaining physical education.
- Exploring other opportunities to engage students in educational setting
- Bring more community efforts into the picture
- Coordinate after school programs off site of school setting which include play - collaborate with community out reach
Save the Date! PART 2 of “Physical Education & Recess as a Platform for Classroom Learning” – Thursday, March 5, 2015 from 9:30 a.m. to 11:00 a.m. CST

The Texas Association for Health, Physical Education, Recreation, and Dance (TAHPERD) president, Dr. Debbie Rhea delivered an engaging presentation about the importance of physical education and recess in Part 1 of the series. Join the Texas Department of State Health Services (DSHS) and TAHPERD in presenting the final installment of the series on Thursday, March 5, 2015 from 9:30 a.m. to 11:00 a.m., CST. You don’t want to miss the return of Dr. Debbie Rhea! In Part 2 of the webinar series, she returns with Texas superintendents and principals to discuss implementation strategies for daily physical education and multiple recesses. Space is limited. Register now at: https://attendee.gotowebinar.com/register/6669294850919833602
PLAY is the highest form of RESEARCH.

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