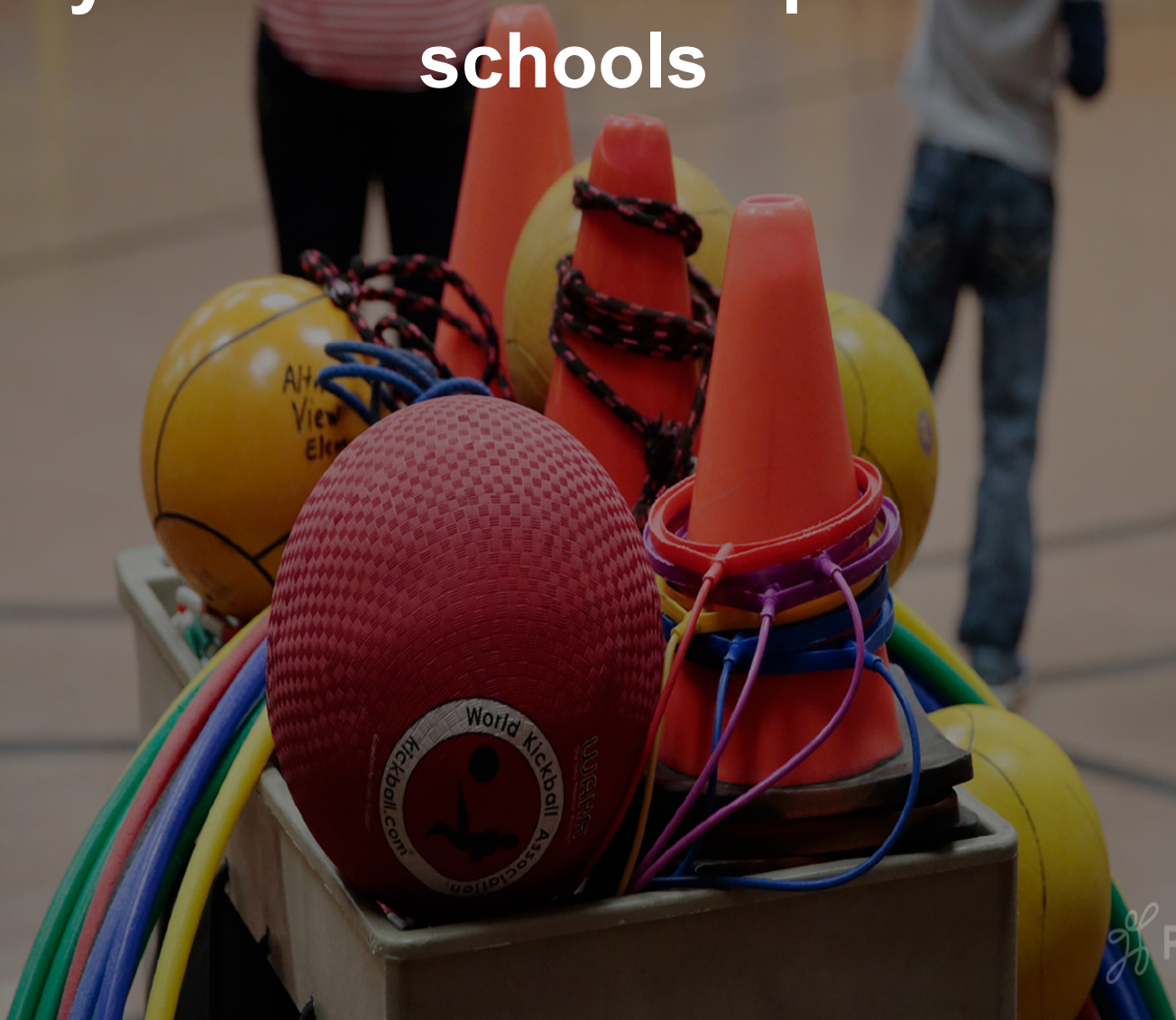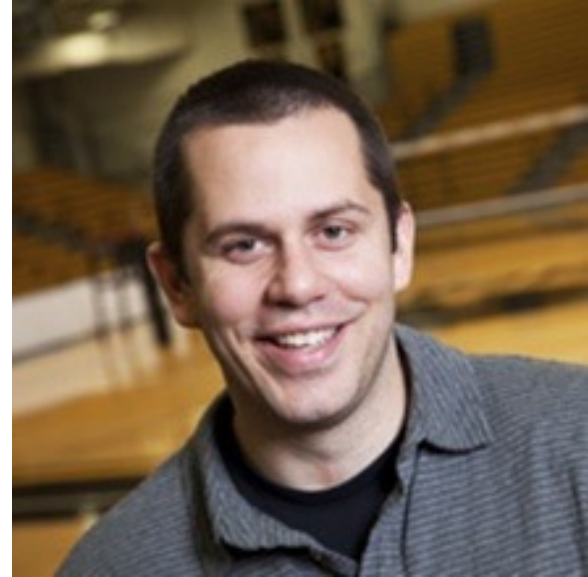# From process to practice: Better understanding the components of a high-quality recess and the implications for schools

Introductions

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Evaluation, Playworks

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2013: The Growing Need

Practice	Research
• Playworks regional expansion complete • Introducing new service models • Partners asking for a way to assess the quality of recess	• How do we measure change on the playground beyond PA? • Group vs individual level measures

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Intentional Design

1. Design the team
2. Research
3. Crowdsource
4. Test

5. Revise
6. Celebrate
7. Repeat

2018-19 Playworks Great Recess Framework Rubric

SAFETY: Play Space & Equipment			
1	**2**	**3**	**4**
1	The play space for recess is unsafe due to hazards (e.g. trip hazards, broken glass/sharp objects, hidden areas that cannot be seen by adults) that aren't identified as "no play" zones. There are significant safety concerns	The play space for recess has some safety concerns due to hazardous areas that aren't identified as "no play" zones	The play space for recess has few safety concerns. There are few hazardous areas but most are identified as "no play" zones	The play space for recess has no safety concerns. It is clearly free of hazards and/or all unsafe areas are identified as "no play" zones
2	The play space for recess is inappropriate (too small, near open roads, etc.) and has many immediate safety concerns	The play space for recess is somewhat inappropriate and has some immediate safety concerns	The play space for recess is mostly appropriate in that there are very few immediate safety concerns	The play space for recess is appropriate in that there are no immediate safety concerns
3	The play space for recess has no clearly identified boundaries for games (no cones, chalk, paint)	The play space for recess has a few boundaries identified but a large percentage of the play space does not have any game space marked	The play space for recess has many boundaries identified but a small portion of the play space does not have any game space marked	The play space for recess is well marked (cones, chalk, paint) and all game boundaries are clear

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Initial Validity Testing

- GRF observations collected at 649 recess sessions
  - 495 schools across 22 urban/metro areas
  - 162 observations conducted by research team
  - 487 observations conducted by Playworks personnel

Playworks Regional Office/Direct-Service Community
Playworks-Trained Locations
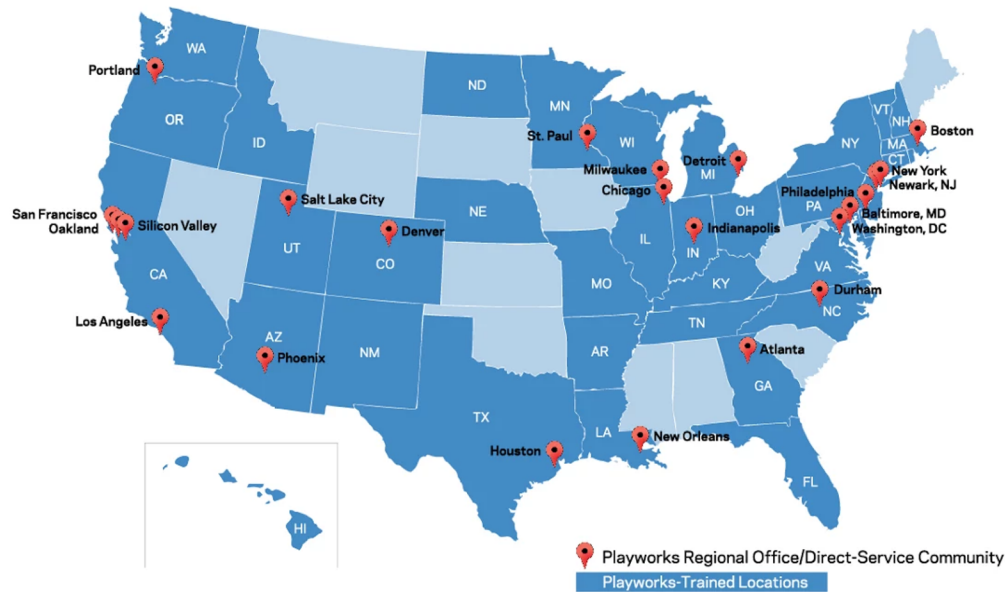
rement model of
RF. S&S = Safety
ructure, AES =
Engagement and
vision, SB =
t Behaviors, T =
ions. CFI = .984,
971, RMSEA =
RSM = .031

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Initial Validity Testing

- Inter-rater reliability data collected at 162 recess sessions
  - Weighted Kappa scores calculated for each individual item ranged from 0.492 – 1.00
    - 76% of items had Kw > .6
    - Allowed us to see where we needed better training
  - Intra-class correlation calculated for each sub-scale
    - Safety and Structure ($ICC_{2,1}$ = 0.892; 95% CI, 0.856, 0.940)
    - Adult Supervision and Engagement ($ICC_{2,1}$ = 0.872; 95% CI, 0.830, 0.905)
    - Student Behaviors ($ICC_{2,1}$ = 0.930; 95% CI, 0.903, 0.949)
    - Transitions ($ICC_{2,1}$ = 0.837; 95% CI, 0.784, 0.878)
    - Total Scale ($ICC_{2,1}$ = 0.951; 95% CI, 0.932, 0.964)
- Test-retest collected across 9 schools
  - Three-day average: ICC = .949, 95% CI, .882, .979; MDC = 4.62
  - Two-day average: ICC = .855, 95% CI, .710, .930; MDC = 7.79

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Sensitivity to Change

- Collected beginning and end of year data at 22 schools
  - 4 schools receiving no services
  - 10 schools receiving Playworks intervention for the first time
  - 8 schools returning as multi-year Playworks intervention

Group X Time Interaction of GRF-OT Scores

d= 0.80

d= 1.20

d= -0.57

60
58
56
54
52
50
48
46
44
42
40

Time 1 GRF   Time 2 GRF

—New —Returning —None
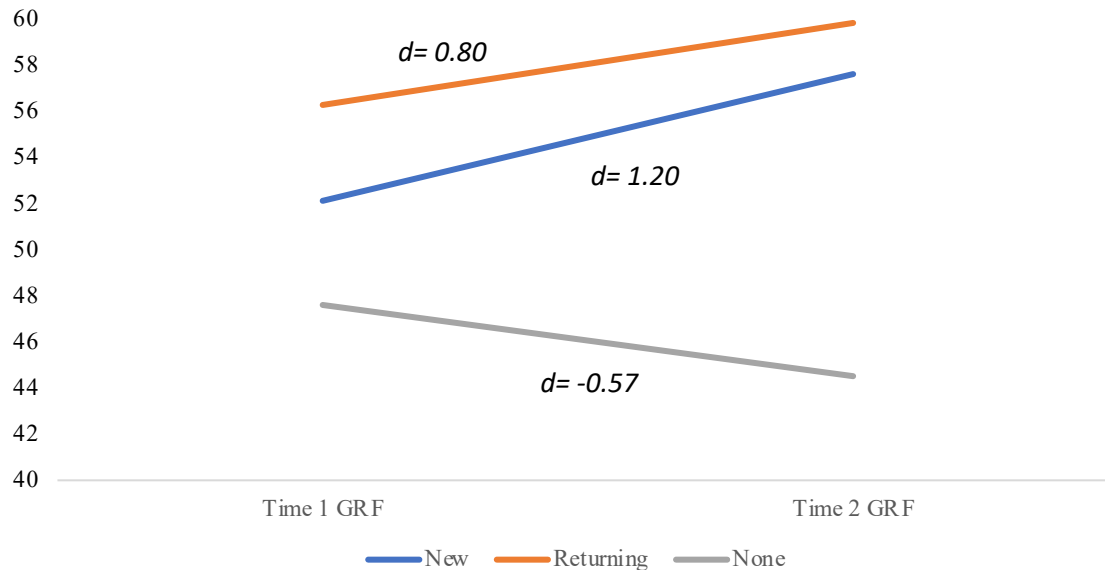
Using our criteria of a minimally important change, recess sessions at first year Playworks schools (Odds Ratio = 21.59; 95% CI 4.27, 109.15) and returning Playworks schools (Odds Ratio = 7.34; 95% CI 1.50, 35.97) were significantly more likely to meet the threshold for meaningful positive change.

Significant interaction effect ($p < .001$; partial eta squared = .328) was detected.

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Switching Gears – What about Play Patterns

OPP Play Domain	Total		Non-intervention
Playing on equipment	11.38%		9.09%
Organized sports and activities	26.54%		26.48%
Active and chase games	14.51%		13.98%
	1.63%		
	1.61%		
	1.67%		
	37.92%	19.40%++	34.20%

Play Patterns by GRF Scores

- Group level data were collected during 61 recess periods across 13 urban schools.

  - More likely to be engaged in playground activities (74% vs 59%; $p < .001$)

  - More likely to engage in light PA (37% vs 33%; $p = .039$);

  - Reported feeling significantly more safe ($p < .001$) than students in a low quality recess.

  - A trend towards lower levels of sedentary activity in a high quality recess were found when compared to a low quality recess (13% vs 17%; $p = .078$), which was more pronounced in female students (14% vs 19%; $p = .045$).

  - No differences were found in levels of MVPA or psychological need satisfaction

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Play Patterns by GRF Scores

- Group level data were collected during 134 recess periods across 9 urban schools.
  - Children were nested within recess sessions; recess sessions were nested within schools
  - Psychological need satisfaction (autonomy, competence, relatedness) was not predictive of PA at recess
  - Adult supervision and engagement was the only variable predictive of children's level of engagement in play during recess
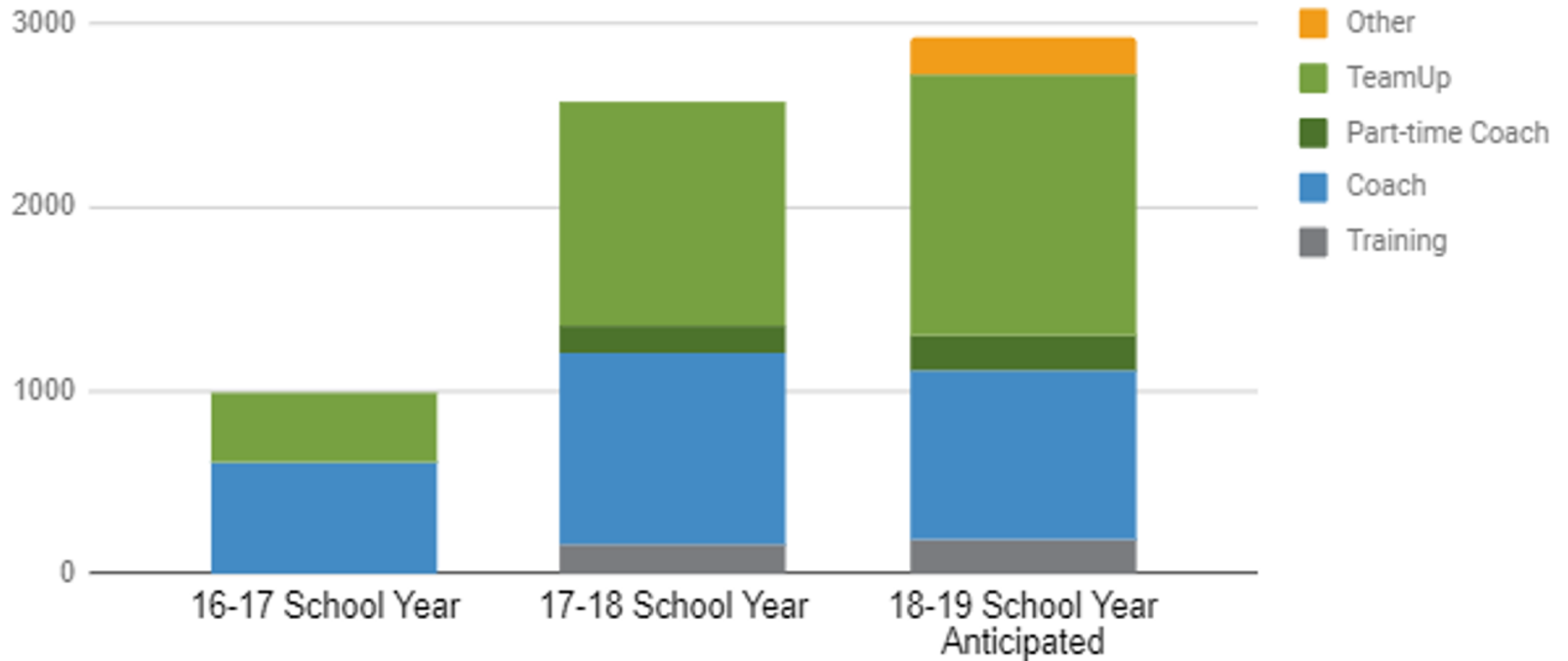

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Broad Adoption

Total GRF Observations by School Year

Rigor vs Reality

1. Everyone completes GRF training
2. Same recess is observed multiple times on different days
3. True baseline observation obtained when possible
4. 3rd grade, lunch recess is observed when possible
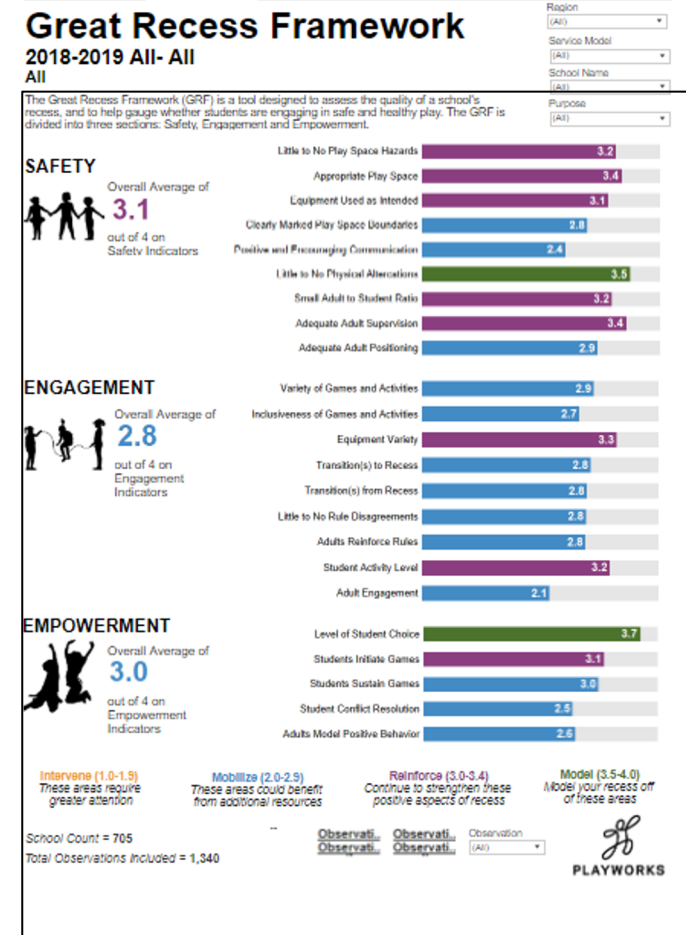5. Streamlined data collection with mobile friendly data entry and accessible reports

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Access to Data

- Reports available within hours of entering data
- Customized filters
- Standard report allows for consistency in messaging with partner schools

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Listen & Respond

National Required:
- Beginning of services
- End of Services

Requests for more frequent & varied use
- Monitoring tool
- Needs assessment
- Action Planning

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Ongoing Refinement

Modifications to data collection practices and protocols

Ongoing Refinement

Modifications to report design

SAFETY

Overall Average of **3.1** out of 4 on Safety Indicators

Indicator	Score
Little to No Play Space Hazards	3.0
Appropriate Play Space	3.0
Equipment Used as Intended	3.5
Clearly Marked Play Space Boundaries	2.5
Positive and Encouraging Communication	2.5
Little to No Physical Altercations	4.0
Small Adult to Student Ratio	2.5
Adequate Adult Supervision	3.0
Adequate Adult Positioning	2.5
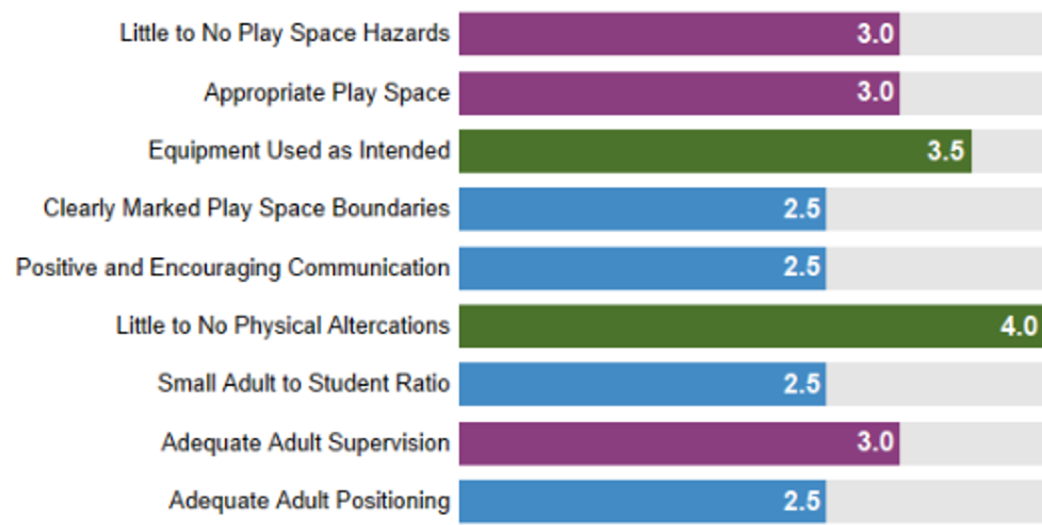
Intervene (1.0-1.9) These areas require greater attention

Mobilize (2.0-2.9) These areas could benefit from additional resources

Reinforce (3.0-3.4) Continue to strengthen these positive aspects of recess

Model (3.5-4.0) Model your recess off of these areas

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Ongoing Refinement

Incorporate space for open ended responses

Successes:

08/24/2018:
Few existing systems in place. (Ball bin, freezing at the end of recess, closing at recess) Positive recess team.

08/27/2018:
Students and adults use positive language. Already a "Closing" existing at the end of recess.

Areas for Improvement:

08/24/2018:
Creating boundaries at all games. More adult part

08/27/2018:
Take inventory of equipment. Order new equipme games.

Action Steps:

Action Item	Lead	Support Needed	Timeline
Introduce new games on a bi-weekly basis during Openings	Recess Team	Games will be taught in PE	9/24
Have JC's assist with closings at least 1 time in the next 2 weeks	Recess Team Closer	Aimee will review this at the next JC training	by 10/01
At kickball, line up the students to divide them into teams and review rules	Recess Team	Team can empower JC's to support/lead this	9/18

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Data Driven Priorities

In collaboration with the **Program Quality** team, we used the Great Recess Framework to:

- Identify 3 **priority areas**
- Establish **numeric goals** for end point GRF data in the priority areas
- **Message** this shift to regional and program staff
- Provide **resources** and coaching around priorities

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Want more?

www.greatrecessframework.org

www.playworks.org

www.recesslab.org

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