



# An overview of the development of the Physical Literacy Environmental Assessment (PLEA) Tool

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# PLEA Tool Overview



**The PLEA Tool is a program evaluation tool to assess how programs are implementing the principles of physical literacy.**

Designed to be used in multiple sectors:

- Physical Education
- Recreation
- Sport
- Dance
- Physical Activity



# Why did we make the PLEA Tool?



- All existing tools assess physical literacy at the individual level
- Need a tool to assess how programs support the development of physical literacy in participants
- Need a tool to assess programs in multiple sectors



# Development Phases



**Phase 1:**  
Pilot Tool  
2014

**Phase 2:**  
PLEA Tool Testing  
& Validation  
2015-2017

**Phase 3:**  
National  
Consultation  
2017

# Phase 1: Pilot Tool



## Step 1: Local Environmental Scan

*15 Tools Identified*

## Step 2: Content Development

15 content experts contacted

*4 Themes Identified*

### **Themes:**

- Environment
- Programming
- Leaders and Staff
- Values and Goals

## Step 3: Content Relevance (Validity)

5 experts assessed relevance of each indicator

# Phase 1 to Phase 2



Wanted more comments  
and feedback



Added comment boxes  
after each question

Relevance of questions  
to end-users?



Added “how relevant is  
this indicator to your  
program?”

# Phase 1 to Phase 2



Wanted more responses



Aimed to recruit 100 Hamilton programs across sport, education, physical activity, recreation and not-for-profit sectors

Need additional validation



Added individual participant assessments

# Phase 2: Testing & Validation



## Physical Literacy Environmental Assessment (PLEA) Tool

This checklist is designed to help us understand if and how your program is implementing the principles of physical literacy. Physical literacy is defined as: "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life."

A child who is physically literate moves competently and confidently in a variety of different environments (such as land, snow or water) with a variety of movement skills (such as swimming, running, jumping, throwing). This child can apply his or her inventory of movement skills to new situations and games easily and understands the importance of being physically active every day.

### PROGRAM INFORMATION

Program name:	
Address:	
Telephone number:	
Person completing checklist:	
Position:	

**In each section below, please check all boxes that apply to your program and how relevant that indicator is to your program (for example, if you are an indoor swimming program, access to outdoor opportunities may not be relevant at all to your program). There are no right or wrong answers, we would like to learn about and understand the variety and scope of physical activity programs in Hamilton.**

**Try to give as much information as you can for each item so that we can understand how programs are able to meet, or not meet, these indicators. Your individual results will be kept confidential. When we share the results of the tool we will not individually name your program or its results.**



# Phase 2: Testing & Validation



## Four Themes:

- |                |                      |
|----------------|----------------------|
| 1. Environment | 3. Leaders and Staff |
| 2. Programming | 4. Values and Goals  |

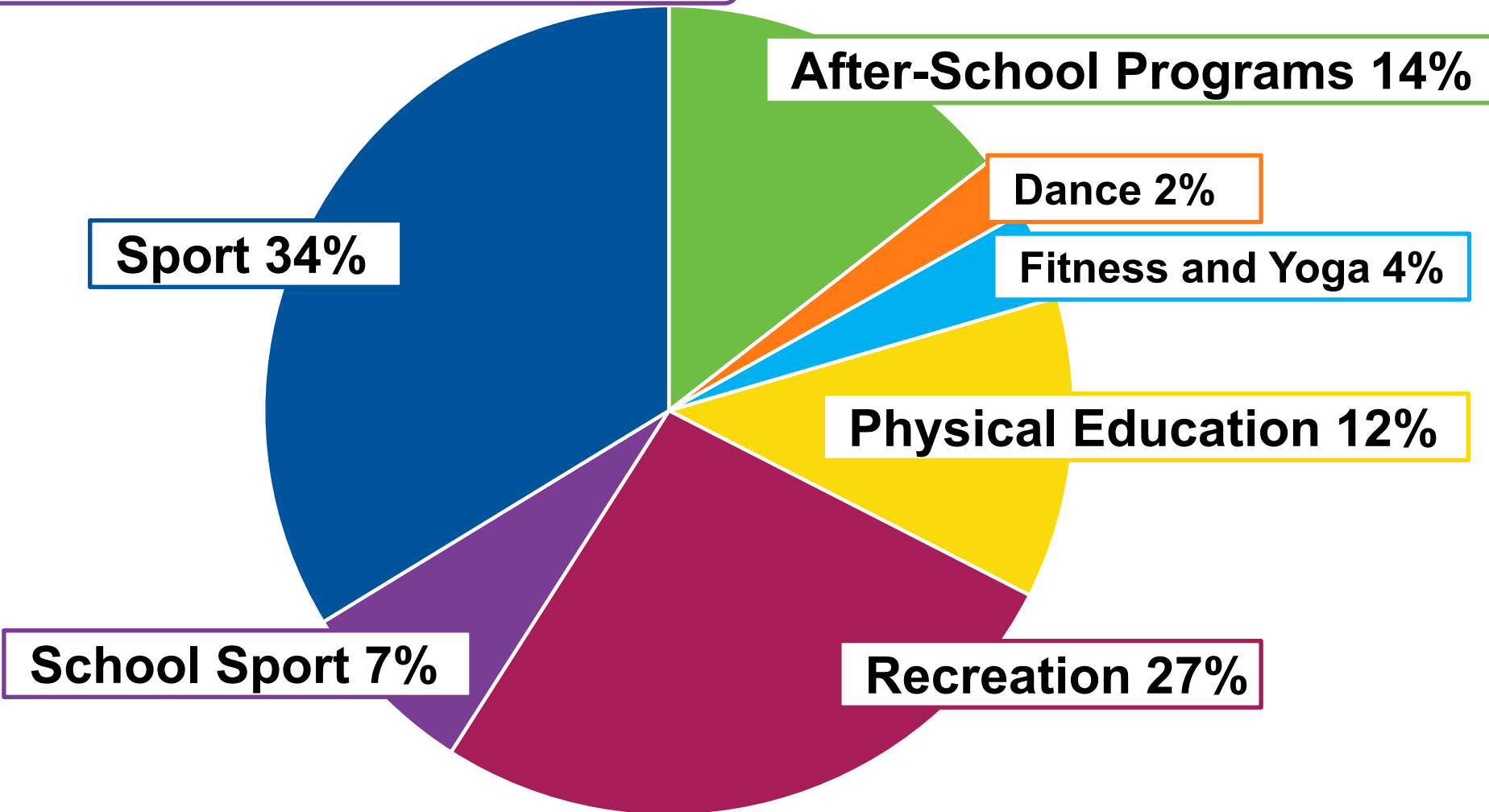
## Example:

<input type="checkbox"/>	Access to outdoor opportunities for activity in a variety of environments			
How relevant is this indicator to your program?	<input type="checkbox"/> Highly relevant	<input type="checkbox"/> Relevant	<input type="checkbox"/> Not relevant	<input type="checkbox"/> Not relevant at all
If not checked, what can your program do to meet this indicator? Comment on any barriers to meeting this indicator.				
If checked, how can your program improve further in this indicator?				
Variety of environments available include (check all that apply):				
<input type="checkbox"/>	Ice/snow (examples: skating, snowshoeing, tobogganing)			
<input type="checkbox"/>	Land (examples: soccer, basketball, ball hockey, cross-country)			
<input type="checkbox"/>	Water (examples: canoeing, swimming, snorkeling)			
<input type="checkbox"/>	Air (examples: gymnastics, diving, trampolining)			

# Phase 2: Testing & Validation



83 Programs in Hamilton participated



# 32 Activities Represented



After-school programs	Martial Arts
Active Recess	Multi-sport
Adventure Running	Physical Education
Baseball	Rugby
Basketball	Rhythmic Gymnastics
Climbing	Skating Lessons
Cross-Country	Soccer
Cycling	Softball
Dance	Sports Camp
Day Camp	Swimming lessons
Drop-in Gym	Synchronized Swimming
Figure Skating	Tennis
Fitness	Track & Field
Flag Football	Volleyball
Gymnastics	Water polo
Ice Hockey	Yoga

## 83 PLEA Tools Completed

### 7 Lowest Scoring Programs

Assessments were not completed in 1 additional program due to scheduling issues

### 9 Highest Scoring Programs

72 Participants  
69% Girls, 31% Boys

10.0 ± 1.6 years old  
(7.0-14.0 years)

72 Participants  
60% Girls, 40% Boys

9.3 ± 1.5 years old  
(6.5-12.0 years)

# Phase 2 Results: PLEA Tool

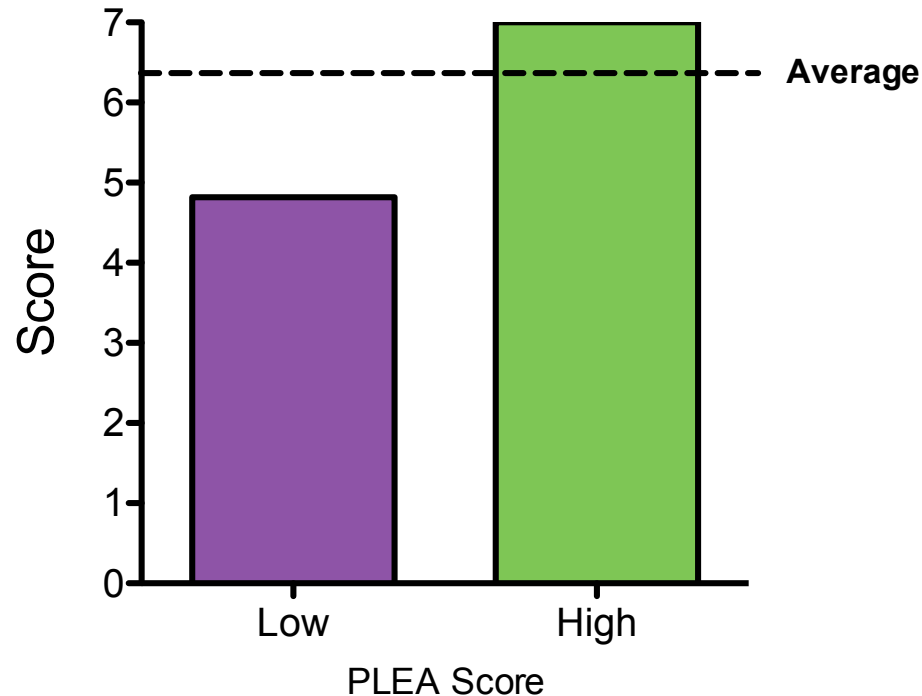


**Average score: 25.3**

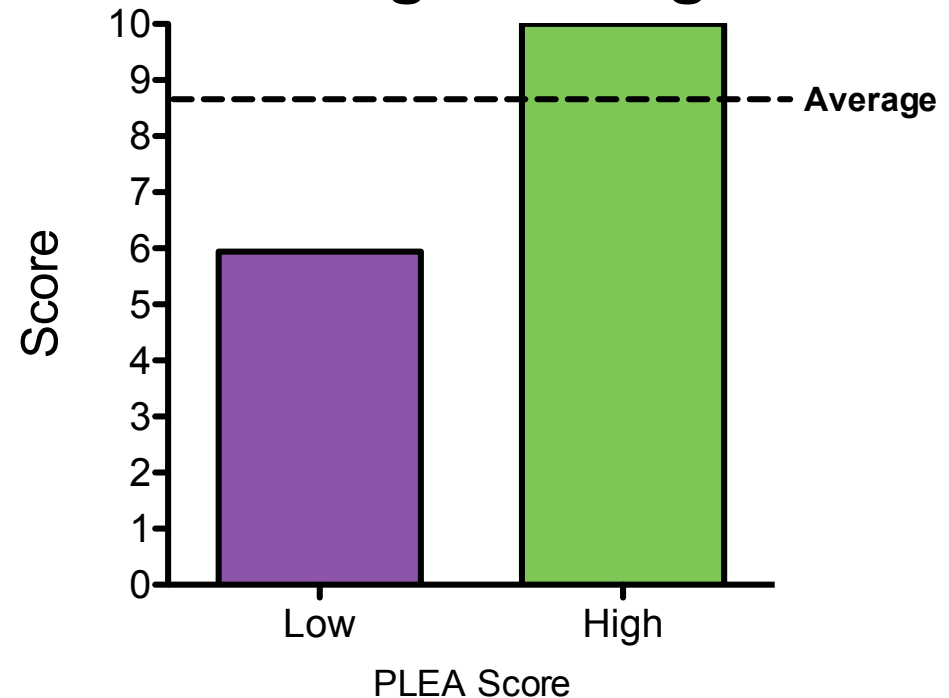
Low: 18.5

High: 29

## Environment



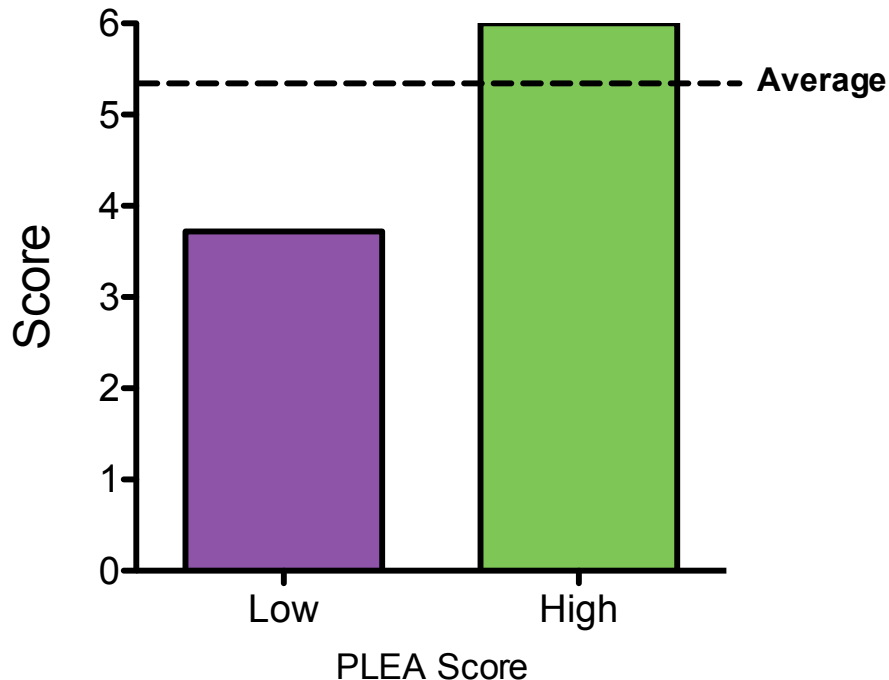
## Programming



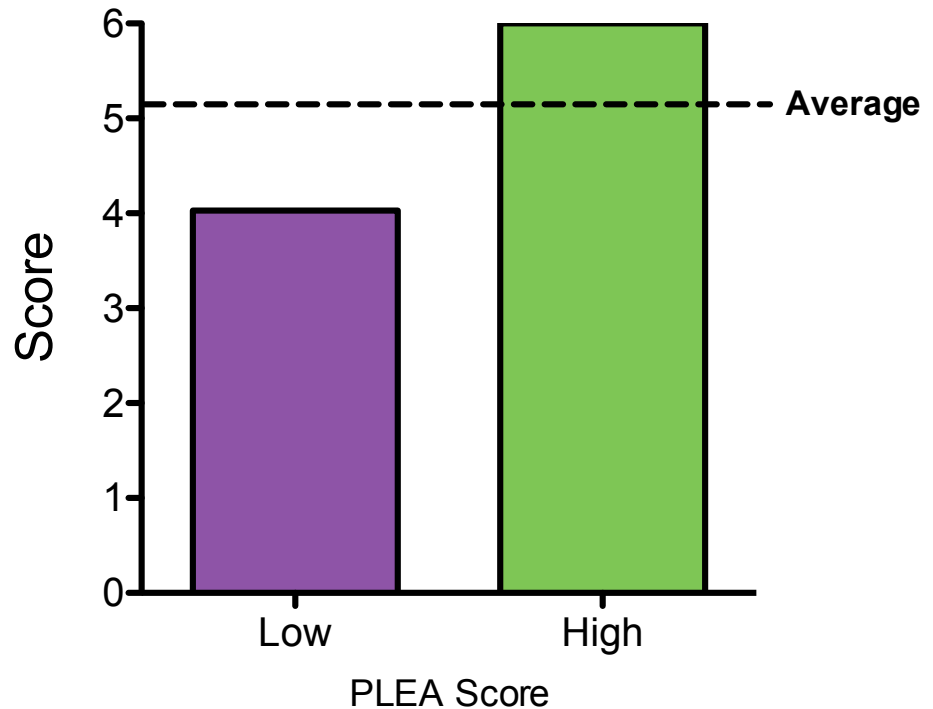
# Phase 2 Results: PLEA Tool



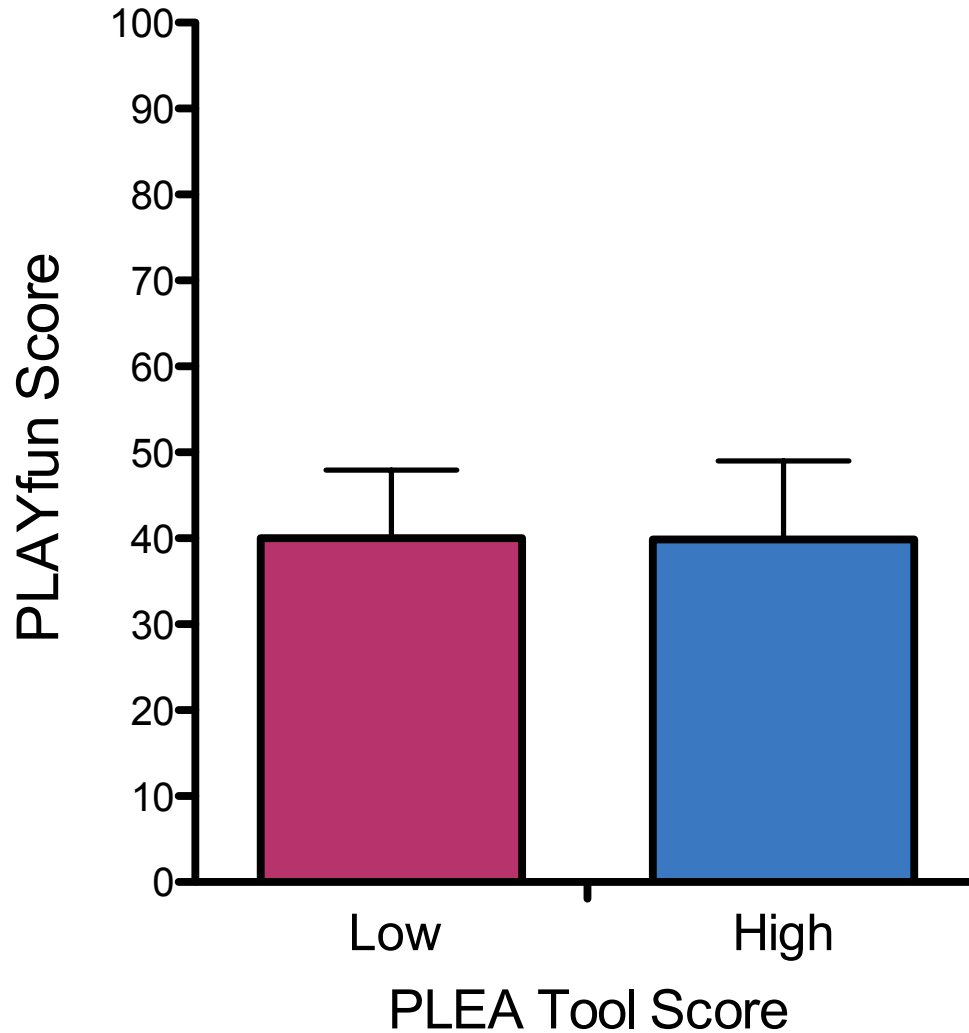
## Leaders and Staff



## Values and Goals



# Phase 2 Results: PLAYfun

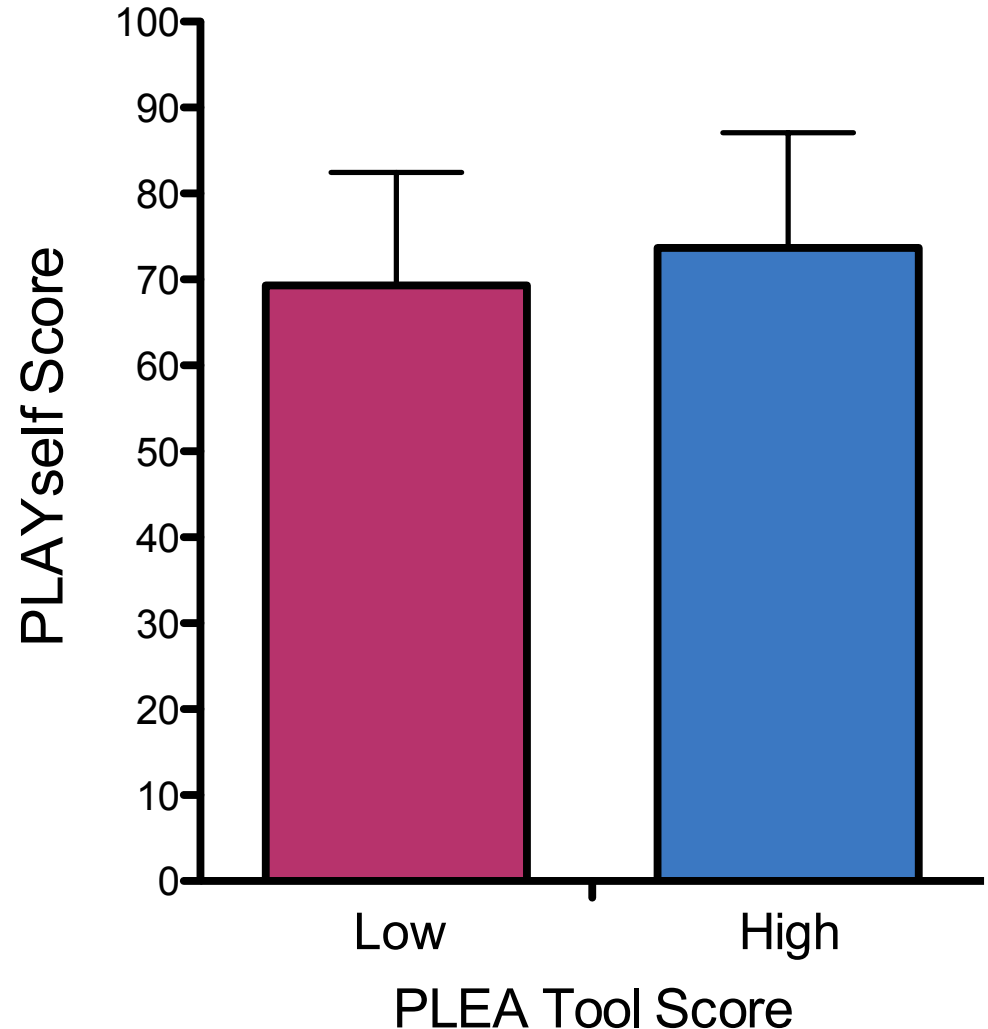


**When models were adjusted for participant's age, sex and specific program, PLAYfun scores were higher in the programs who scored high on the PLEA Tool.**

# Phase 2: PLAYself Results



**When models were adjusted for participant's age, sex and specific program, PLAYself scores were higher in the programs who scored high on the PLEA Tool.**





- Reworded several indicators to ease clarification
- Combined indicators that were repetitive
- Added follow-up questions:
  - If answered yes,
    - How can your program improve further in this area?
  - If answered no,
    - What can your program do to meet this indicator?
    - What barriers prevent your program from meeting this indicator?

# Phase 3: National Consultation



**Survey Open:** May 17, 2017 to July 31, 2017

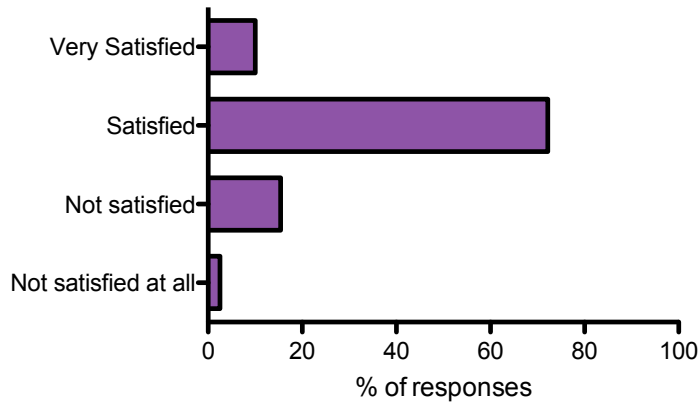
1. Circulated PLEA Tool nation-wide
2. Participants completed PLEA Tool online
3. Participants provided feedback on PLEA Tool



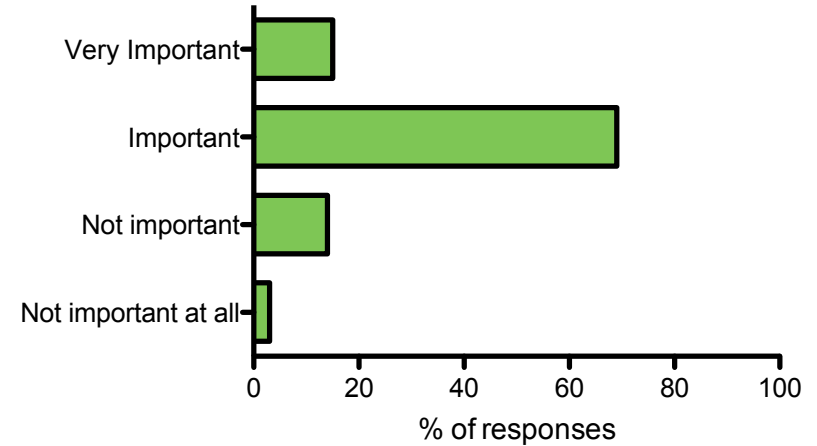
# Phase 3 Results



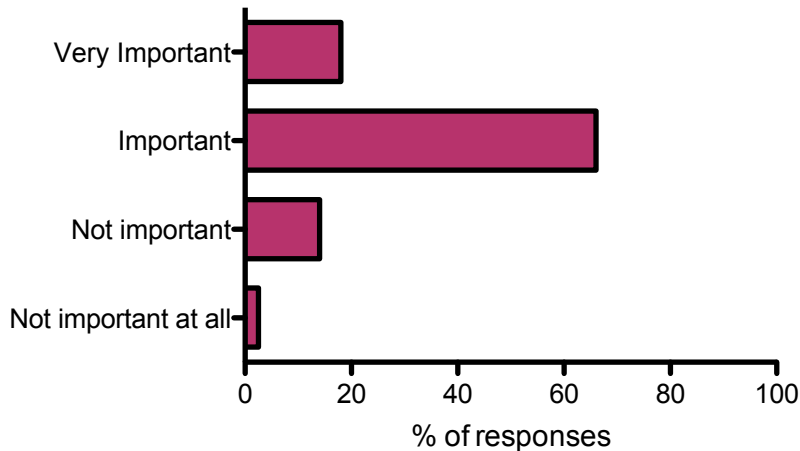
Please indicate your level of overall satisfaction with the PLEA Tool as a way of helping you understand if and how your program is implementing the principles of physical literacy?



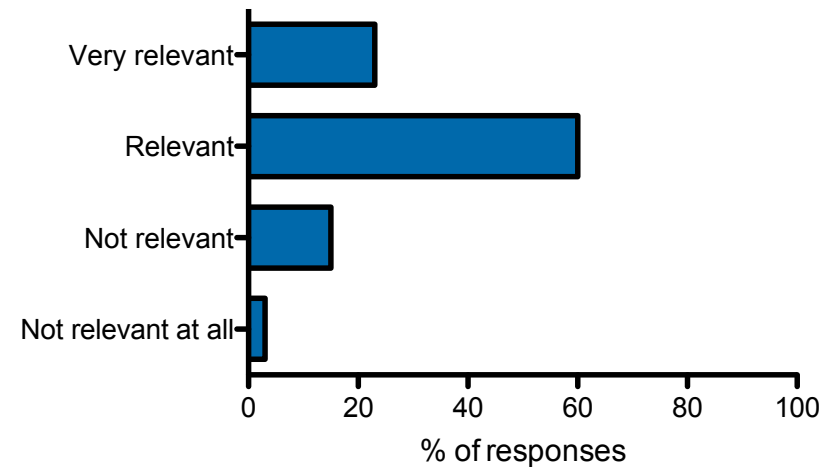
Is the PLEA Tool important to program planning and delivery?



Is the PLEA Tool important to program evaluation?



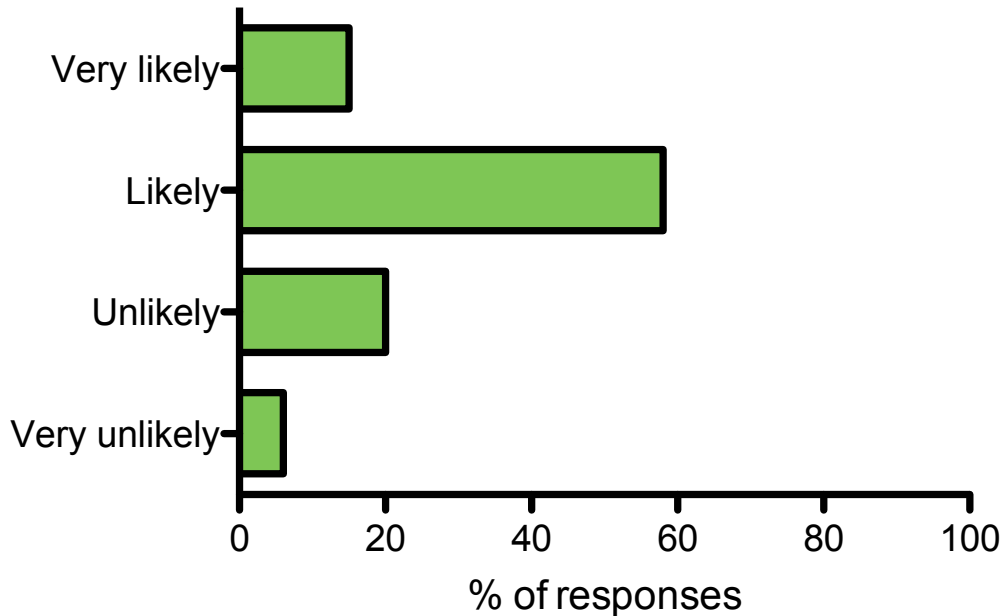
Is the PLEA Tool relevant to your area of practice?



# Phase 3 Results



How likely are you to use the PLEA Tool?



## General comments:

- Too long
- Add links to resources
- Good exercise in self-evaluation
- Consider in-between or somewhat option
- Useful tool for leader training

# Phase 3 Next Steps



## 1. Remove indicators with $\geq 90\%$ agreement

- 7 indicators to be removed
- Example: “Program leaders help motivate and encourage participants by being inclusive and positive”
  - 97% of respondents answered yes

## 2. Thematic analysis of survey responses

- Will be used to update indicators
- We want indicators to be as specific as possible
- Ongoing, to be completed in February 2018

# PLEA Tool Next Steps



Finalize questions and release of PLEA Tool to public

Prepare manuscript of PLEA Tool Development Process

Consider adapting PLEA Tool for additional demographics



# Acknowledgements



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## Sport for Life:

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Bhanu Sharma  
Samantha Li  
Dr. Brian Timmons

## Hamilton Public Health:

Alison Bochsler



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