



GUIDE

Created by:

Andrzej Rokita PhD, Tadeusz Rzepa PhD and Marek Nowicki

Developed by:

Andrzej Rokita PhD, Ireneusz Cichy PhD, and Sara Wawrzyniak PhD

University School of Physical Education Wroclaw, Poland

What is BRAINball™?

BRAINball™ is an innovative and unique physical education learning system that merges physical activity and academic learning through play.

Instructors and students use 100 mini soccer and basketballs and 100 lesson plans to develop math, reading, grammar, spelling, anatomy and foreign language skills. In addition to the physical benefits, significant improvement will be seen in gross and fine motor skills, cooperative and cognitive learning. BRAINball™ can be incorporated into Adapted Physical Education programs as well as those teaching students with learning disabilities, such as dyslexia.

BRAINball™ is broadly adaptable across elementary and secondary grades, and while an excellent tool for physical education, it is also perfect for use in the classroom, after-school, recreation and sports programs.



Why use BRAINball™?

Developed by the University School of Physical Education, Wroclaw, Poland in 2002, BRAINball™ has almost two decades of proven research published in numerous books, research publications, and doctoral dissertations. Ask us how to set up a professional development workshop at your school.



BRAINball™ Research



STUDY #1: BRAINball™ is introduced in integrated education on reading and writing skills and physical education in students. **RESULTS: Participants redcognized letters and read better.**

STUDY #2: First grade students use BRAINball™ to help acquire knowledge and mathematical skills. **RESULTS: By the end of the school year BRAINball™ participants had better results than their peers who didn't.**

STUDY #3: BRAINball™ used in integrated education on reading and writing for dyslexic children. **RESULTS: Students improved in dictation writing and reading with comprehension.**

STUDY #4: BRAINball™ is used to help adapt students to physical exercise. **RESULTS: Results showed students had a similar level of heart rate whether they were using BRAINballs or regular play balls**

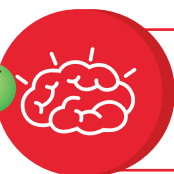
STUDY #5: The effectiveness of developing hand-eye coordination using BRAINball™. **RESULTS: When tested at the end of the school year tests showed stronger results in the right hand than the left.**

STUDY #6: Graphomotor skills, eye-hand coordination and temporal-spatial orientation improvement. **RESULTS: Positive changes in these areas were seen in all students.**

STUDY #7: Using BRAINball™ in P.E. along with subject matter from classes. **RESULTS: Those P.E. classes showed BRAINball™ helps teach basic movement and writing skills**



DID YOU KNOW?



Students who played BRAINball™ throughout the school year opposed to those who didn't showed better results in mathematical knowledge and skills.

Significant improvement in physical fitness and body coordination was seen in disabled children using BRAINball™.



Dyslexic children also showed improvement in the number of words read per minute, reading with understanding, time of reading and number of errors.

BRAINball™ helps increase graphomotor skills and hand-eye coordination in participants.



Authors: Andrzej Rokita, Ireneusz Cichy, Sara Wawrzyniak, Kaczmarczyk, Krysmann, and Pawlik, Cichy at the University School of Physical Education Wroclaw

What does BRAINball™ include?

Each set includes a lesson book filled with 100 games/activities, 100 mini basketballs and soccer balls (size 3) in five colors – red, orange, yellow, blue and green – and equipment bags. There are 40 yellow and 40 green basketballs with letters (upper & lower case) and numbers, 8 red and 8 blue soccer balls with math symbols, and 4 orange “wild card” (blank) balls. BRAINball™ book is not sold individually.



Sample Lesson

Lesson Title

B as in BRAINBALL

Objective: to develop the skill of forming words beginning with a certain letter, improve the ability to work in a team, and improve certain motor abilities and physical skills.

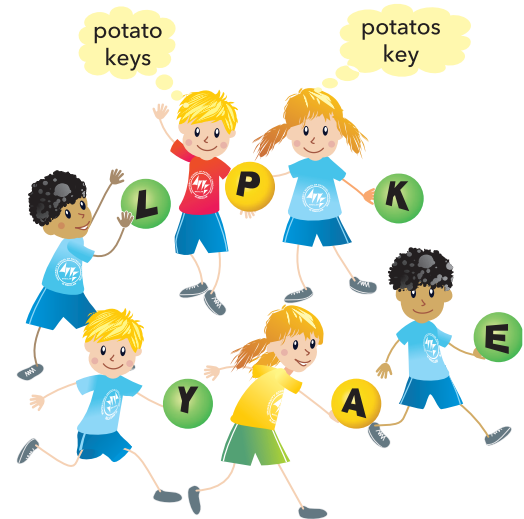
Number of participants: any number

Area: gymnasium or open air

What kind of playing area is needed for the lesson

How many people can be active in the lesson

Lesson Objectives



Visual aid for easier understanding

Lesson Description that is easy to teach and understand

Description: The students are divided into two teams (yellow and green team). Each team gets a ball with the letter “B”, which they place on a rubber ring at the starting line. The students’ task is to come up with as many words as they can beginning with the letter “B”. The yellow team uses the green balls and the green team uses the yellow balls. The students must cooperate to transport the balls to their starting lines. They cannot move with the ball in their hands. They need to pass the ball to each other while transporting it to their line. They have 5 minutes to complete the task. After this time, the teacher checks the correctness of the words. The teacher can award 1 point for each word or one point for each letter in a word. The winning team is the team that scored the most points.

2302PS

866-323-5465

SchoolHealth.com/PhysEd

@SHPhysEd

 **SCHOOL HEALTH**
Physical Education