



# Krīḍā

Enabling rigorous learning of maths and science through sports



Majority of students in our schools find academics, including science and math, uninspiring. We know that a significant percentage of students naturally excel in ***bodily-kinesthetic intelligence***—the ability to learn through physical activity, movement, and hands-on experiences.

However, current teaching methods tend to favour abstract and theoretical approaches, leaving students feeling disconnected.

When students fail to relate to abstract concepts, they often perceive themselves as “not good enough,” leading to a lack of confidence and disengagement.

Another challenge is that students are forced to choosing either sports OR academics in their career pursuit. Excelling in one at the expense of the other is an accepted norm. **Learning thrives in an environment that aligns with students' interests and strengths.**

By integrating science and math within the context of sports, we can create engaging learning experiences that allow students to connect with the academic concepts in a practical and meaningful manner, kindling the joy of learning.

Through Krīḍā, we are fundamentally reimagining learning Science and Math in our schools to bring purpose, joy and rigour to nurture excellence both on the field and in the classroom.



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PURPOSE



RESEARCH

To evaluate the impact of sports-based learning on students's competencies

Develop strategies and resources for effective adoption of rigorous and engaging sports-based curriculum across Indian schools

## IMPACT

Make learning joyful, purposeful with improved learning outcomes in schools across the socio cultural spectrum of the society.

Bring about a paradigm shift in the teaching-learning process by establishing an alternative way of teaching science and mathematics

## Krīḍā Curriculum

The curriculum, for grades 5-10, in line with the National Curriculum Framework and predominantly based on kinesthetic learning pedagogy, will include learning resources for students, tools and content for evaluation, teacher training model and methods, and resources for teachers.



**COLLABORATIVE DEVELOPMENT** with sports coaches, science researchers, teachers and education researchers



**RESEARCH BACKED** learning resources for teachers and students



**MULTI-YEAR ENGAGEMENT**, partnering with government and private schools, for grades 5 to 10



**EDUCATION RESEARCH**, Longitudinal and multidimensional research project

## An Education Research Project

As an education research institute, Prayoga intends to pursue Krīḍā to conduct rigorous longitudinal experimental research

- to study the impact of these learning strategies on **students' conceptual understanding, competencies and abilities** including higher-order thinking skills.
- to understand the long-term benefits of **integrating physical activities into the curriculum on students' physical health, mental well-being and related aspects** will be part of the study.
- to evolve strategies to make **sports-based curricula effective across a wide variety of schools** with parameters and metrics to evaluate the effectiveness of implementation.

## Program Impact



- Change how society views the relevance of these subjects
- Help students see the real-world applications of scientific and mathematical concepts
- Shift the ways students learn and engage with science and mathematics, improving learning outcomes
- Encourage schools to move beyond traditional teaching methods and explore innovative ways to understand science and math through sports

In line with the philosophy of Prayoga, the Krīḍā learning model, once established, **will be open-source**, with resources, strategies and tools accessible to any student, teacher or school across the country.

*Prayoga's academic team* of teachers in science and mathematics, education researchers, pedagogy experts, and scientists will work with *professional sports coaches and science teachers at The Sports School* to develop the curriculum.

Working with private schools in urban and rural schools, Prayoga and The Sports School intend to make the Krīḍā curriculum viable across the societal spectrum.

In collaboration with the Education Department of various state governments, Krīḍā will be implemented in sports-based curricula for government schools across geographies.



**Krīḍā has the potential to fundamentally and significantly alter teaching-learning in Indian schools. Support Krīḍā and be a part of this exciting nation-building endeavour.**

## Prayoga Institute of Education Research

Prayoga Institute of Education Research is a not-for-profit education organisation helmed by Dr H S Nagaraja, an eminent physics teacher and devoted educationist.

Prayoga's team includes Education Researchers, Scientific Researchers, Science and Mathematics Faculty, Pedagogy experts, Data Science experts, Program Management professionals and others working together to find systematic and creative solutions to address the challenges of the current Education System.

Prayoga's social impact programs have been designed to implement interventions designed to improve the quality of education across the country.

Guided by rigorous research, these programs are intended to be scalable, impacting countless learners in the country.



## The Sports School

The Sports School - India's first integrated School with a state-of-the-art campus, located in Bangalore, is a one-of-a-kind institution for students to learn as they play.

It has redefined education by making Sports a medium of education and an integral part of learning, thereby fostering holistic development among the student community. It offers professional-level training in sports without compromising on academics.

As India's first Sports school, they have embedded Sports as a formal subject within its curriculum, complete with performance-oriented evaluations that cover aspects such as guidelines comprehension, match analysis, Discipline and Commitment, and psychological readiness among others.