



ABOUT SURYA INSTITUTE

Surya Institute (SI) was founded in 2006 by Prof. Yohanes Surya, PhD with a mission to reform Science and Math education in Indonesia. Our efforts are based on how to promote Science and Math learning to be fun, easy and meaningful, so that what the students learn will become life skills and prepare them to excel in the workforce. Moreover, we believe that through the advancement of Science and Math education, Indonesia could have plenty of high quality human resources who could highly contribute to both local and international community. In order to do that, besides researching and developing materials and method, SI also works together with regional and national governments and schools to train teachers across Indonesia

BACKGROUNDS ON SURYA INSTITUTE'S FOUNDER

Prof. Yohanes Surya began to train the Indonesian Physics Olympiad Team (TOFI) in 1993 and since then, every year, Indonesia's team achieves formidable results in both the Asian Physics Olympiad (APhO) and the International Physics Olympiad (IPhO). Throughout his experience in training TOFI, he discovered weaknesses in the teaching of Physics and Math in Indonesia, resulting in a longer training period needed for TOFI. Not only were the students' science and math competencies lacking in substance but there were many misconceptions. Besides lacking in knowledge, most students also do not have strong analytical nor logical thinking skills. Learning Science and Math in Indonesia is tenses, boring and difficult because it still focuses on rote learning and formulas rather than concept exploration/discovery learning, problem solving and development of thinking skills.

With the teaching and training methods he has developed, Prof. Surya has successfully trained students from small areas in Indonesia and from simple backgrounds to excel and win in prestigious international science competitions.

These experiences have brought him to establish Surya Institute in order to spread the learning spirit and method to students across Indonesia. Our slogan is '*Asyik, Mudah dan Menyenangkan*' or translated as 'Fun, Easy and Enjoyable'. Besides being fun and easy, we make sure that the learning process is meaningful for students so that what they learn will become life skills and prepare them to excel in the workforce.

VISION

“INNOVATORS, NOT IMITATORS”

Our vision is that through meaningful Science and Math education, Indonesian people will become innovators, not imitators, in advancing, creating and developing technology, such that we will succeed in independently managing our abundant and rich natural resources.

MISSION

- Advancing science and math education in Indonesia through fun, innovative and creative methods of learning and teaching;
- Assisting, supporting and collaborating with teachers, schools and governments in developing programs to advance science and math education.

KEY STRATEGIES

PARTNERSHIPS

We build strong partnerships with all stakeholders in Science and Math education from all levels, such as regional/national governmental institutions, universities, schools, teachers, students, parents, business/industries and other local/ international educational/social institutions. We believe that all stakeholders mentioned above—both at the policy level and grassroots level—are important change agents. We assist governments and universities/schools in making changes in the policy and we also stimulate grassroots movements in order to accelerate the changes.

EMPOWERMENT

SI has been trusted by many regional governments—such as Papua and Bontang—and schools to develop Science and Math education in Indonesia. Our programs always focus on how to empower the regions/schools. We recognize the needs in the regional governments and schools in how to exercise given autonomy to develop programs suitable for each specific needs.

PROGRAMS

RESEARCH & DEVELOPMENT

We research and develop innovative and effective teaching and learning methods that are suitable for Indonesian students. We implement the methods in our student and learning materials in all forms of media (prints, hands-on, CDs and video). There are schools and regions who have started to implement our methods and materials for their Science and Math classrooms and we plan on continuing to work together with more schools and regions in Indonesia.

Ongoing R&D activities are:

- **Fun and easy physics learning method or known as ‘Fisika Asyik, Mudah & Menyenangkan’.**
This method started by Prof. Yohanes Surya, PhD is the best innovative practice in physics education, not only in Indonesia but also in the world. The learning process is not based not on formulas but on the concept of understanding and problem solving. Moreover, it teaches students to solve physics problems not by using formulas but analytical skills & logical thinking. For junior high level, we introduce it as *‘Fisika tanpa Rumus’* or *‘Physics without Formulas’*. It

has helped students to understand Physics easily. Not only that, it has improved students' analytical skills and logical thinking, which are basic requirements for being innovators in the future.

➤ **Curriculum for gifted students.**

We realize that there are many gifted students across Indonesia of which they should be handled seriously as they are great assets to accelerate Indonesia's development. We are developing the curriculum for all school levels.

Our current gifted curriculum are used in:

1. **KELAS SUPER**, in partner with *Dinas Pendidikan DKI Jakarta*
2. **BRILLIANT CLASS**, in partner with *Yayasan BPK Penabur*

TEACHER TRAININGS

Teachers, as the key player in education, are our main partners. We train teachers to use our methods and even to further develop it themselves. Our target is to be able to train at least 25-30 teachers/regency in all 400-ish regencies in Indonesia, of which these teachers will then continue to spread the teaching method to teachers of schools within their respective regencies.

Several key features of our training programs are:

- Experiential learning (practicing simulation in several methods of teaching & learning process in classrooms);
- Activity-based learnings;
- Hands-on experience;
- Practical, fun and simple.

From the trainings conducted, the teachers are very satisfied as our method is very practical and applicable for their classes. They also are inspired and become very spirited because they themselves enjoy and gain so much during the trainings.

CONSULTANCY

We provide consultancy and assistance for regions or schools to develop strategies in advancing the quality of its Science & Math education. The consultancy program is crucial to ensure sustainability of the expected results. Our current consultancy programs are with the district government of Bontang & Serui.

Partnering with **Eka Tjipta Foundation**, we also assist 7 (seven) public and private schools in Bumi Serpong Damai area in the implementation of **Fisika Asyik**.

CAMPAIGN

We conduct campaign programs to socialize *Sains & Matematika Asyik* through competitions, fun events and media programs. Our targets of campaign are students and general public.

PORTFOLIO

TEACHER TRAININGS

- Training Science and Math Elementary & Junior High teachers in 100 districts; in partnership with **Department of Education National & District Level**, 2006 - 2007. (List of districts is attached.)
- Science & Physics Teachers Workshop in Jakarta, Surabaya, Medan & Bandung; in partnership with **Australian Education Center**, February - March 2006.
- Physics Workshop for *Madrasah Aaliyah* Teachers; in partnership with **Department of Religious Affairs**, November 2006.
- Workshop for Science & Math Elementary teachers in Riau; in partnership with **PT. Chevron Pacific Indonesia**, Januari 2007.
- Workshop for Science & Math Elementary & Junior High teachers in Pangkalpinang; in partnership with **Department of Education in Pangkalpinang**, August 2007.
- Workshop for Physics & Math teachers, in partnership with **Sekolah Global Mandiri**, 2007-2008

CONSULTANCY

- Consultancy in the District Governments of Bontang and Serui.
Programs designed include capacity buildings of teachers and other staff related to education, training programs for teachers and students and outreach programs for gifted students.
- In partnership with **Eka Tjipta Foundation**, we provide assistance in 7 (seven) Junio High Schools in implementing Fisika Asyik in each school. The program include 14-days teacher training, classroom visits, facilitating regular teacher meetings and annual science fair. All schools involved in this program are in Bumi Serpong Damai area:
 1. SMPN 1 Serpong
 2. SMPN 2 Serpong
 3. SMPN 3 Serpong
 4. SMP Al Azhar
 5. SMP St. Ursula
 6. SMP Tarakanita
 7. SMP Athalia

CAMPAIGN

- *Creative Math Competition* for Elementary Schools in Jakarta area; in partnership with **Yayasan BPK Penabur**, March 2007.
- *Hallo Physics Competition* for Junior High Schools in Jakarta area; in partnership with **Hewlett Packard Indonesia**, March 2007.
- Workshop “*Sedotan dan Fisika*” or “*Straws & Physics*” for Junior High School students; in partnership with **Yayasan Kalam Kudus Surakarta**, March 2007.
- *Physics Competition* for High School Students in Jakarta area; in partnership with **Universitas Pancasila**, June 2007.
- *Road Show Hallo Physics-Gramedia*; in partnership with **Hewlett Packard** and **Gramedia**, July 2007.
- *Cerdas Cermat & Lomba Karya Ilmiah “Listrik dan Energi Baru”*; in partnership with **Museum Listrik dan Energi Baru**, October & December 2007.
- Host for *American Mathematics Competition*; in partnership with **Math Oasis PTE LTD & The Mathematical Association of America**, November 2007.
- Host for **Asian Science Camp** di Bali, 3 – 9 Agustus 2008.