

Scentres

Office of the Non-Formal and Informal Education
Office of the Permanent Secretary



Ministry of Education

Thailand's

Science Centres for Education

Office of the Non-Formal and Informal Education
Office of the Permament Secretary
Ministry of Education

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Science Centres for Education

1. Overview

Science has assumed a vital role in human societies, as its presence is clearly visible in every facet of our life – from daily life to work. Tools, devices and other modern conveniences are the practical product of incorporating our knowledge of science with creativity and other academic disciplines. This has been pushing forward significant technological advances. As such, science education not only inculcates scientific thinking skills into a single individual, but also lays a solid foundation for advancing the economic and social progress of a nation as a whole.

With 16 centres serving different regions across the country, Science Centres for Education strive to provide science-related learning experiences, through non-formal and informal education means, with an aim to supplement science education in the formal schooling system. Their overriding *raison d'être* is to open and widen the door of learning opportunity for the Thai people, ensuring universal and inclusive access to the needand situation-based education in line with the underlying education reform principles.

2. Background

The concept of "science learning hub" embodied in the present-day Science Centres for Education can be traced back to the success of Thailand's first planetarium, which played an integral part in inspiring science learning among Thai youth and public at large.

From this significant first leap came the 1971 establishment of Thailand's Science Museum as the venue for science education and exhibition. Later in 1979, the science museum evolved into the Science Centre for Education, under the Office of the Non-Formal and Informal Education (formerly the Department of Non-Formal Education) of the Ministry of Education.

Then, on the auspicious occasion of H.M. the King's Golden Jubilee in 1990, Rangsit Science Centre for Education and its network were established to further extend the reach of learning opportunity and bridge the existing educational disparities, allowing Thai youth and public the equal and inclusive access to non-formal science education suited to their potentials and preferences.

3. Contacts

Region	Science Centre	Address	Website & Tel. no.
Bangkok	Science Centre for Education	928 Sukhumvit Rd., Khlong Toei District, Bangkok 10110	http://www.sciplanet.org Tel. (66) 2 391 0544, (66) 2 392 0508
Central	2. Rangsit Science Centre for Education	5 Moo 2, Rangsit- Nakhonnayok Rd., Klong Hok, Rangsit, Thanyaburi District, Pathum Thani 12110	http://rscience.go.th/eng/ Tel. (66) 2 577 5456
	3. King Mongkut Memorial Park of Science and Technology at Waghor	181 Moo 4, Klongwan, Muang District, Prachuap Khiri Khan 77000	http://www.waghor.go.th Tel. (66) 32 661 098
	4. Phra Nakhon Si Ayutthaya Science Centre for Education	115 Moo 6, Phailing, Phra Nakhon Si Ayutthaya District, Phra Nakhon Si Ayutthaya 13000	http://ay-sci.com/web/ Tel. (66) 3532 2485
	5. Samut Sakhorn Science Centre for Education	28/44 Moo 1, Jesada-Khokkham Rd., Khokkham, Muang District, Samut Sakhorn 74000	http://www.scissk.net/ Tel. (66) 34 452 122
	6. Kanchanaburi Science Centre for Education	12 Pakphraek, Muang District, Kanchanaburi 71000	https://www.facebook. com/kansci Tel. (66) 34 602 563

Region	Science Centre	Address	Website & Tel. no.
North	7. Lampang Science Centre for Education	Moo 12, Bouhaew, Muang District, Lampang 52100	http://lpsci.nfe.go.th Tel. (66) 54 230 855
	8. Nakhon Sawan Science Centre for Education	Nakhonsawan-Oak, Muang District, Nakhon Sawan 60000	http://www.nwsci.go.th Tel. (66) 56 256 522 (Ext. 14)
North- east	9. Khon Kaen Science Centre for Education	Mittraphap Rd., Ban Phai, Ban Phai District, Khon Kaen 40110	http://www.kksci.com Tel. (66) 43 274 154 (to 5)
	10. Ubon Ratcha- thani Science Centre for Education	415 Chayangkul Rd., Muang District, Ubon Ratchathani 34000	http://www.facebook .com/ubonsci Tel. (66) 45 311 714
	11. Nakhon Ratchasima Science Centre for Education	208 Mittraparp - Nonkram Rd., Mittraparp, Sikhio District, Nakhon Ratchasima 30140	http://www.koratsci.net Tel. (66) 44 416 983-5
	12. Roi Et Science and Cultural Centre for Education	32 Moo 2, Babbiwet, Thawatburee District, Roi Et 45170	http://www.101sci.com Tel. (66) 43 569340
East	13. Sa Kaeo Science Centre for Education	597/49 Suwannason Rd., Muang District, Sa Kaeo 27000	http://sakaeo-science 2012.blogspot.com Tel. (66) 37 425 427

Region	Science Centre	Address	Website & Tel. no.
South	14. Trang Science Centre for Education	12 Kokloe, Muang District, Trang 92000	http://www.trangsci.com/ Tel. (66) 75 582 303
	15. Nakhon Si Thammarat Science Centre for Education	Moo 3, Bankor, Phrom Khiri District, Nakhon Si Thammarat 80320	http://www.nakhonsci. com Tel. (66) 75 396 363
	16. Yala Science Centre for Education	1/29 Sateng, Muang District, Yala 95000	http://www.facebook.com/ yala.sci Tel. (66) 73 214 920

4. Activities

The Science Centres for Education serve students in both formal and informal education systems as well as the general public with learning opportunities covering a broad spectrum of science, technology and environment through 4 key activities as follows:

- 4.1 Permanent and mobile exhibitions, with activities to promote the learning of science, technology and environment
- 4.2 Science, technology and environment camps, conducted in the forms of day or overnight science camps with activities to encourage visitors to exchange their knowledge and experience, to develop the capacity as well as positive attitude towards

learning science, technology and environment, and to gain experience and skills for group living and teamwork

4.3 Education activities, ranging from learning activities for formal students to science, astronomy and environment contests and competitions, community outreach programmes as well as training, lectures or seminars

4.4 Academic Services, in various forms, such as publications or Internet resources, radio broadcasts, journals and newspapers

In addition, visitors can enjoy 3-D planetarium experience at Rangsit Science Centre for Education, or aquarium experience at King Mongkut Memorial Park of Science and Technology in Waghor, Prachuap Kiri Khan.



Science Centre for Education

Rangsit Science
Centre for
Education



Samut Sakhorn Science Centre for Education

Nakhon Sawan
Science Centre for
Education

King Mongkut
Memorial Park
of Science and
Technology
at Waghor

สุนสริทธาลาสลร์เพื่อการลิกษา

Centerwaredoper



Phra Nakhon Si Ayutthaya Science Centre for Education

Ubonratchathani Science Centre for Education





Lampang Science
Centre for
Education

Khon Kaen
Science Centre
for Education





Nakhon Ratchasima Science Centre for Education

Roi Et
Science and
Cultural Centre
for Education





Sakaeo Science Centre for Education

Trang Science
Centre
for Education



Nakhon Si Thammarat
Science Centre
for Education

ศูนย์วิทยาศาสตร์เพื่อการศึกษายะลา

Yala Science Centre for Education



1. Science Centre for Education

General Background

Science Centre for Education is a government agency under the Office of the Non-Formal and Informal Education, Office of the Permanent Secretary, Ministry of Education.

Science Centre for Education, the first Science Centre of Thailand, was established in 1992. It developed from the merging of the Bangkok Planetarium and the Centre for Educational Museum which established in 1975 and 1979.

Since the Science Centre for Education is engaged in non-formal and informal education, the centre is also involved with lifelong learning, serving the people of Thailand. Taking a holistic approach to learning, the Centre focuses on Science, Technology, Natural Science, Environmental Science and Astronomy.

Science Centre for Education offers a broad spectrum of activities at its six buildings.

Activities

1. Bangkok Planetarium

The area surrounding the planetarium features exhibitions revolving around the theme of astronomy and space (in both

Thai and global contexts), and the planetarium itself presents an immersive theatre experience about astronomy as well as celestial events.

2. Science and Technology Building

This facility features exhibitions covering various disciplines of science and technology. Visitors can also enjoy hands-on science experience through scientific research and experiment, and answer questions on the basis of verifiable scientific principles – all by themselves.

3. Underwater World

This aquarium exhibits the "Miracle of Marine Life", and provides insights into underwater ecosystems, life along coral reefs and the evolution of fish.

4. Natural Science Building

This Nature and Environment building is dedicated to thematic exhibitions of natural science.

The Dinosaurs (2nd floor) presents the origin of the earth, the evolution of life and the age of dinosaurs.

Green Planet (4th floor) educates visitors about the origin of life and DNA

World of Insects (5th floor) allows visitors to learn about and feed insects in real-life settings to observe their life cycles.

Kid City (6th floor) targets children aged 3-8 years with interactive exhibits and hands-on activities that encourage them to play.

The Miracle of Life (7th floor) tests visitors with thought-provoking and challenging games.

Natural Heritage (8th floor) amazes visitors with the nature's diversity.

5. Science Camp Residence and Distance Education Institute

6. Health Science Centre

The centre provides information about health and exercises and is equipped with workout facilities, a swimming pool, a futsal pitch and a tennis court.

The Science Centre for Education also features others educational activities: exhibitions, laboratories, demonstrations, workshops, science camps, science tours and performances. Also notable is the outreach programme through mobile exhibitions regularly visiting schools in Bangkok and beyond. The Science Centre also organizes annual events, for example on Children's Day (the second Saturday of January) and during National Science Week (18 – 24 August).

In addition, the Science Centre also caters to early childhood population through its "Children's Discovery House"

in Khlong San District, offering science learning activities and exhibitions to children aged 3-6 years.

Opening hours : Tue-Sun from 9.00 – 16.30 hrs (Closed on Mondays and public holidays)

Entry fees: THB 20 (child) and THB 30 (adult)

The planetarium also provides a 1-hour theatre experience on the following days :

Tue-Fri with 2 sessions starting 11.00 and 14.00 hrs

Sat-Sun with 4 sessions starting 11.00, 13.00, 14.00 and 15.00 hrs

Contact: 928 Sukhumvit Rd., Khlong Toei District, Bangkok 10110

Tel.: (66) 2 391 0544, (66) 2 392 0508, (66) 2 3921773

Fax: (66) 2 392 0508, (66) 2 391 0522

Email: nsce@sci-educ.nfe.go.th

Website: http://www.sciplanet.org

2. Rangsit Science Centre for Education

General background

The three-storey building of Rangsit Science Centre for Education comprises of 15 galleries, most of which are interactive and hands-on related to various science and technology themes. In case that you do not have much time, we recommend you to explore the gallery of "Prehistoric World" or "Basic Science".

For the one who is really interested in astronomy, we recommend you to take a visit to our planetarium. Rangsit Science Centre for Education is one of three Science Centres for Education in Thailand that has planetarium. The planetarium dome is the modern tilt dome with 19.5 meters diameter and can accompany 160 seats per show. Since there are two systems of star projector; opto-mechanical and digital projector, so we have two types of services in the dome; namely star show and full dome movie show.

Activities

1. Science camp

The centre offers one-day, two days and three days camp. The learners can acquire learning process in science and technology.

2. Training / Seminar

This activity aims for teachers and the public to attend the training/seminar course on new knowledge and information in science, technology and environment. The learners can acquire new knowledge and adapt for their occupation and daily life.

3. Experiment in the laboratory

The Rangsit Science Centre has "Tissue culture laboratory" for doing research and arranging learning activity in tissue culture for the interested public.

4. Science classroom for students

This activity is for students both formal and informal system as a supplement classroom so the students can acquire all 8 syllabuses of learning process in science according to the basic curriculum and basic NFE curriculum.

5. Mobile Unit

This is the service to the community in basic science, technology and environment, astronomy and space so the community can apply in their daily life by learning from mobile exhibitions and learning activities.

Opening hours : Tue-Sun from 09.00 – 16.00 hrs (Closed on Mondays and public holidays)

Entry fees: THB 10 per person, THB 100-200 per person for

science camp

Contact: Rangsit- Nakhonnayok Road, Khlong Hok, Thanyaburi

District, PathumThani 12110, Thailand

Tel.: (66) 2 577 5456-9

Fax: (66) 2 577 5455

Email: support_rsce@hotmail.com

Website: http://rscience.go.th/eng

Facebook: Rsce Rangsit

3. King Mongkut Memorial Park of Science and Technology at Waghor

General Background

King Mongkut Memorial Park of Science and Technology at Waghor was founded on 16 June 1993 in remembrance of King Mongkut (King Rama IV) or the Father of Thai Science, who despite the lack of efficient equipment calculated the exact time and place of the solar eclipse at Waghor in 1868.

Activities

1. Waghor Aquarium

With approximately 3,600 square metres of exhibition area, Waghor Aquarium serves as a learning hub for marine science, natural history and environment for children, youth, the general public and students in formal and non-formal education systems. The aquarium puts on show a diverse range of marine life in simulated natural ecosystems from fresh water to brackish and seawater habitats. It aims to create a learning society and promote self-learning with a variety of exhibitions and activities offering both knowledge and entertainment through hands-on experience with state-of-the-art technology, encouraging visitors to link the knowledge and experience gained with their daily life.

2. Astronomy and Space Exhibition

This group of 3 buildings houses exhibitions related to astronomy and space, science and technology, as well as the exhibition of King Rama IV's life and his genius accomplishments.

3. Butterfly Garden

Visitors enjoy close encounter with a vast diversity of indigenous butterfly species in beautiful habitats, and learn about stages of their life cycle from eggs to caterpillars to pupae and eventually mature butterflies. They can also unwind amidst natural ambience or rest in a quiet area and appreciate the serenity of waterfall and the sight of swimming fish.

4. Waghor Camps

Visitors enjoy friendly and relaxing camp activities offering a perfect blend of education and entertainment. They can also develop the skills for group living, teamwork and leadership, as well as unity and punctuality among others.

Opening hours: Mon-Sun from 9.00 – 1600 hrs

Entry fees : THB 20 (adult), THB 10 (child) and Free for senior citizens, Buddhist monks/novices, the physically challenged and the underprivileged

Contact: 181 Moo 4, Klongwan, Muang District, Prachuap

Khiri Khan 77000

Tel.: (66) 32 661098 Fax: (66) 32 661727

Website: http://www.waghor.go.th

4. Phra Nakhon Si Ayutthaya Science Centre for Education

General Background

Phra Nakhon Si Ayutthaya Science Centre for Education (ASCE) was established and supervised by Non-Formal Education Department, Ministry of Education on November 8, 1995. Later in 1977, when Thailand underwent the most radical education reform in the administrations of the Ministry of Education, the Department of Non-Formal Education was changed to the Office of the Non-Formal and Informal Education, an agency under the Office of the Permanent Secretary for Education.

The responsibilities of the ASCE is to provide various models of activities to encourage public awareness of science, technology and environment in daily life, responsive to an individual's needs and open up opportunities to acquire knowledge at any time in their lives by emphasizing the principles of freedom, justice and equal access to learning opportunities. It targets especially those who miss out on formal education can acquire knowledge for improving their quality of life.

The main target group of the ASCE is for the out-of-school populations in rural areas all over the 6 provinces (Chai Nat, Saraburi, Sing Buri, Lop Buri, Ang Thong and Phra Nakhon Si



Ayutthaya), who miss the opportunity in formal schooling system, after compulsory education. Students in formal schools are our second target group.

Activities

Activities provided by ASCE can be categorized into 4 main areas as follows:

1. Permanent Exhibitions

There are 8 interactive permanent exhibitions:

- 1.1 Astronomy Exploration & Planetarium.
- 1.2 ICT World; Hardware / Software / Internet & Website
- 1.3 Discovery Room (Integrated Science for Kids): Toys and Tales corner for children age between 3-8 .
- 1.4 Basic Science; Cycloid / Kaleidoscope / Kaleidovision / Chladni's Figure / Longitudinal Wave / Vortex / Gyroscope / Floating Ball / Ballistic Pendulum / Convex & Concave Mirrors / Spinning Chair / Look into Infinity / Anti Gravity / Run Uphill / Illusion Ring / Resonance Pipes / Standing Wave / Chaos / Momentum Arch / Colour Shadow / Magic Cubes / Vision of the Great Scientists
 - 1.5 Health Science; Body and Health / Sport / Fitness Park.
- 1.6 Natural & Environment Science ; Biodiversity / Ecosystem / Herb
 - 1.7 Renewable Energy
 - 1.8 The Local Technology Project of the King

2. Science Camp

3. Educational Activities

Educational Activities are provided in terms of Non-Formal education or lifelong learning through various kinds of media and activities to give people access to scientific educational opportunities at any time they need. The main activities organized in this area of services are as follows:

3.1 Indoor Programme

- Star Shows
- Science Show
- Science Tour
- Science Contest
- Seminar
- Training Course/ workshop (for teachers and students)

3.2 Outreach Programme

The ASCE realized the importance of having access to the information and education resources to the communities. Not all people in remote areas can visit the Centre. Therefore, the Science Centre for Education's Outreach Programme aims to reach communities that have limited exposure to science and technology. Mobile units are developed to meet this aim. There are two kinds of mobile units:

- Traveling Exhibitions (educational activities are included)
 - Mobile Planetarium



4. Academics Services

Academics Services are provided in terms of informal education or lifelong learning through various kinds of media and activities to give people access to scientific educational opportunities at any time they need. The main activities organized in this area of services are as follows:

- 4.1 Media Library
- 4.2 Internet
- 4.3 Website
- 4.4 Newsletter
- 4.5 Brochures

Opening hours : Mon-Fri from 08.30 – 16.30 hrs (Closed on public holidays)

Entry fees: THB 10 per person, THB 100-200 per person for science camp

Contact: 115 Moo 6 Phailing Sub-District, Phra Nakhon Si

Ayutthaya District, Phra Nakhon Si Ayutthaya, 13000

Tel.: (66) 35 322 485

Fax: (66) 35 322 484

Email: ay sci@yahoo.com

Website: http://ay-sci.com/web/

5. Samut Sakhorn Science Centre for Education

General background

Samut Sakhorn Science Centre for Education was founded in 1997 to provide knowledge of science and technology to student and the general public living in Samut Sakhorn, Samut Songkhram, Patum Thani, Nonthaburi, Petchaburi and Prachuap Khiri Khan (as well as the centre's vicinity such as Bangkok).

Activities

- 1. On-site and off-site Science Camps
- 2. 7 learning bases allow visitors to gain insights into science, technology and environment through easy-to-understand media.
- 3. Science lab offers visitors an opportunity to learn from hands-on science experiments and practical experience.
- 4. Mobile exhibition presents science exhibition in various places.
- 5. Contents on science knowledge, projects and innovations, Science show and Science quiz competition.

6. Capacity-building programs for science teachers in formal and non-formal education systems.

Opening hours : Mon-Fri from 08.30-16.30 hrs (Closed on public holidays)

Entry fees : Free, THB 20 per person for science lab and train-

ing, THB 110-330 per person for science camp

Contact: 28/44 moo 1, Jesada-Khokkham, Muang District,

Samut Sakhorn 74000

Tel.: (66) 34 452 122

Fax: (66) 34 452 122 (ext. 102)

Website: http://www.scissk.net/

6. Kanchanaburi Science Centre for Education

General background

Since its official opening on 21 September 2002, Kanchanaburi Science Centre for Education has been providing scientific learning experience to the people in 4 provinces (Kanchanaburi, Ratchaburi, Suphan Buri and Nakhon Pathom).

Activities

1. 4-D Theatre Experience

The centre's 4-D Theatre features learning experience through the audience's perception of width, length and depth - offering new experience exclusive to theatres only. This highlight suits audience of any age and gender, and allows them to apply the knowledge and experience gained to their daily life.

2. Science, Technology and Environment Camp

The camp serves as a venue for children, youth and the general public to exchange views and to develop hands-on experience, skills and positive attitudes towards science, teamwork and leadership. The centre organizes both day - and overnight – science camps, for a period of 1 to 3 days or as requested by visitors.

3. Educational Services

At the centre, young people and adults make the most of spare time by learning about scientific principles related to daily life through a variety of educational activities, such as science show contests, science week, children's day and the Young Inventor Camp.

4. Exhibitions

Exhibitions are provided with multi-media for visitors' enhanced learning experience, either as guided or self-guided tours. The centre's permanent exhibitions span over a vast area of science education, from living things and life sustenance to energy and GIS. The mobile exhibitions on the other hand cover astronomy, global warming and sky watching through a telescope.

5. Academic Services

The centre provides science education to youth, the public and specific target groups through training, conferences/seminars and study visits. Highlights include scientific invention workshops, science project workshops and science centre volunteer programme.

Opening hours: Mon-Fri from 08.30-16.30 hrs (Closed on

public holidays)

Entry fees: Free

Contact: 12 Pakphraek, Muang District, Kanchanaburi 71000

Tel.: (66) 34 602 563

Fax: (66) 34 602 628

Email: kansci@hotmail.com

Facebook: www.facebook.com/kansci

7. Lampang Science Centre for Education

General Background

Lampang Science Centre for Education was established on 27 June 1997 to serve the science learning needs of people in the upper North of Thailand, covering Chaing Mai, Chiang Rai, Lamphun, Lampang, Phrae, Nan, Phayao and Mae Hong Son.

Activities

Lampang Science Centre for Education offers 4 different types of services :

1. Exhibitions

Exhibitions are organized indoors and outdoors, through interesting media that engage visitors in hands-on experience. In addition, the centre also offers mobile exhibitions at various places to educate the public about scientific principles with challenging games, science play kits, and so on.

2. Science Camps

The centre's day - and overnight – science camps, as well as offsite science camps focus on fun science learning experience. The camps develop visitors' reasoning ability and other skills, as well as positive attitude towards learning about science and environment.

3. Capacity-building programme for NFE teachers

This programme is aimed at equipping NFE teachers with skills needed to facilitate students' project-based learning in accordance with Non-Formal Basic Education Curriculum B.F. 2551.

4. Science Outreach Programme

Through this programme, the centre organizes learning activities with communities and sub-district non-formal and informal education centres to educate the locals about science, technology and environment for life improvement and career development for themselves and their families.

Opening hours: Monday-Sunday from 08.30 – 16.30 hrs

Entry fees : THB 10 per person for exhibition, THB 50-300 per person for science camp, etc.

Contact: Moo 12, Bouhaew, Muang District, Lampang 52100

Tel.: (66) 54 230855

Fax: (66) 54 230857

Email: lpsci@hotmail.com

Website: http://lpsci.nfe.go.th

Facebook : www.facebook.com/lpsci

8. Nakhon Sawan Science Centre for Education

General Background

Nakhon Sawan Science Centre for Education facilitates science learning through exhibitions revolving around basic science and environment, astronomy and space, agricultural technology and so on. It also offers science camps, science teacher training, and science show. The areas covered include Tak, Uttaradit, Sukhothai, Kamphaneg Phet, Phitsanulok, Phichit, Phetchabun, Uthai Thani and Nakhon Sawan.

Activities

The centre organizes day - and overnight – science camps to students, with an aim to develop their information searching skills, positive attitudes, teamwork and leadership.

1. Science Show

Visitors can enjoy science experiments presented in the form of magic shows.

2. Energy Camp

The camp lets visitors gain basic knowledge of energy, energy consumption and its impact, as well as energy conservation.

3. Biologist Camp

As its name suggests, the biologist camp trains visitors with skills needed for scientific experiments.

4. Science, Technology and Environment Camp

In this camp, visitors learn an integrated learning experience that combines scientific skills with nature and environment. They also sharpen their leadership and personality to live harmoniously with others, with a focus on creativity and teamwork.

5. Astronomy and Space Camp

Visitors have a chance to learn about astronomy, celestial happenings, and basic observation through various enjoyable activities.

6. Agricultural Science Camp

The centre's agricultural science camp allows visitors to learn about nature and environment in connection with the relaxing ambience of self-sufficiency farm. It also helps strengthens a bond of friendship among visitors.

7. Planetarium

Opening hours: Mon-Fri from 08.30 – 16.30 hrs (Closed on

public holidays)

Entry fees: THB 10, THB 135-635 per person (camp)

Contact: Nakhonsawan-Oak, Muang District, Nakhon Sawan

60000

Tel.: (66) 56 256522 (ext. 14)

Fax: (66) 56 256523

Email: nakhonsawan sci@hotmail.co.th

Website: http://www.nwsci.go.th

9. Khon Kaen Science Centre for Education

General Background

Khon Kaen Science Centre for Education was officially established on 27 June 1997 and has been providing scientific knowledge to the public since 10 March 1999. The centre also serves Sakon Nakhon, Nong Khai, Nong Bua Lam Phu, Loei and Udon Thani.

Activities

1. ASEAN Science Camp

The ASEAN Science Camp is aimed at promoting understanding and positive attitude among students and the public towards the ASEAN-related changes in the future. The camp consists of learning bases offering activities about ASEAN from its origin and aims to facts about member countries. It also promotes science skills and knowledge, as well as social skills, scientific and democratic minds and ethics.

2. Workshop on "Science for Career Development in Community"

This workshop provides career development training to CLC facilitators in Khon Kaen through lectures, demonstration and practice by drawing on the experience and local wisdom of trainers in the community. These CLC facilitators will further

help the locals in improving the existing jobs and creating job opportunities.

Opening hours : Mon-Fri from 08.30 – 16.30 hrs (Closed on public holidays)

Entry fees: THB 5 per person, THB 10 per person for sci-

ence show

Contact: Mittraphap Rd., Ban Phai, Ban Phai District, Khon

Kaen 40110

Tel.: (66) 43 274154 (to 5)

Fax: (66) 43 274046

Email: kk.science@hotmail.com

Website: www.kksci.com

10. Ubon Ratchathani Science Centre for Education

General Background

Ubon Ratchathani Science Centre for Education was officially opened on 30 January 1998 to provide services related to the education of science, technology and environment to students in both formal and non-formal education systems in the areas responsible. It covers Yasothon, Roi Et, Kalasin, Maha Sarakham, Nakhon Phanom, Mukdahan, Amnat Charoen and Ubon Ratchathani.

Activities

Through its Mobile Science Lab, the centre offers NFE learners with science learning bases, such as

- Food contamination testing, introducing learners to common contaminants in food, testing methods as well as fast and easy way of decontamination
- Basic science, giving learners opportunity to enjoy
 scientific play
- Natural Farming, presenting self-reliant farming with the use of biological mechanism in eliminating pests and improve crop yields

- Natural diversity, allowing learners to study ecological diversity in nature
- Astronomy and space, educating learners with astronomical lectures as well as the evolution of astronomy and its relation with astrology

Opening hours: Mon-Fri from 08.30 – 16.30 hrs (Closed on public holidays)

Entry fees: Free, THB 100-200 per person for science camp, THB 10 per person for astronomy lecture, THB 10 per person for science show

Contact: 415 Chayangkul Rd., Muang District, Ubon Ratcha-

thani 34000

Tel.: (66) 45 311 714

Fax: (66) 45 315 365

Email: ubon_s@nfe.go.th

Website: http://ubonsci.nfe.go.th

Facebook: https://www.facebook.com/ubonsci

11. Nakhon Ratchasima Science Centre for Education

General background

Nakhon Ratchasima Science Centre for Education is located in an area of lush green trees, clean fresh air and water habitats that are suitable for learning about natural science and astronomy. Apart from Nakhon Ratchasima itself, the centre also serves 4 surrounding provinces: Si Sa Ket, Surin, Buri Ram and Chaiyaphum.

Visitors will find a science exhibition and educational activities such as "The Stone quarry Exploration"; focusing on geology by cutting stones in an ancient method and local Thai herbs.

By investigating the waters of Sapprado Reservoir, the visitors learn ecology in an exciting and fun setting. The "Sustainable Energy Camp" is an area, 23.33 acres large, showing wind, sun and water energies and their properties. Furthermore, we can provide a science camp that covers different non-formal subjects.

Activities

1. Science camp

The centre's science camp is intended to allow participating students to share their knowledge and hands-on experience to develop desired skills and attitudes.

2. Exhibitions

Exhibitions feature learning multimedia in the forms of permanent, temporary and mobile exhibitions.

3. Educational services

These science educational services are delivered in the form of training, seminars and workshops on science-related topics.

4. Academic services

Knowledge of science, technology and environment is provided through various media and publications.

Best practice

Science camp: Exploring Stone Quarry

This science experience lets visitors learn about various happenings on earth and the sphere of relations among the processes that affect particular weather and geographical conditions as well as the shape of the earth.

Opening hours: Mon-Fri from 08.30 – 16.30 hrs (Closed on

public holidays)

Entry fees: THB 10 per person

Contact: 208 Mittraparp-Nongkram Rd., Mittraparp, Sikhio

District, Nakhon Ratchasima 30140

Tel.: (66) 44 416 983 (to 5)

Fax: (66) 44 416 983

Email: koratsci@hotmail.com

Website: www.koratsci.net

12. Roi Et Science and Cultural Centre for Education

General Background

Roi Et Science and Cultural Centre for Education is an educational establishment attached to the Office of the Non-Formal and Informal Education (ONIE) under direct administration of the Office of the Permanent Secretary for Education.

The Ministry of Education has declared for establishing Roi Et Science and Cultural Centre for Education (RSCCE) on December 13th, B.E. 2550 (A.D. 2007), which its main task is to be the centre of arranging and serving the science and cultural knowledge, be a source of life-long learning education, the famous enjoyment academic centre, the academic tourist attraction, the science and cultural disposition for children and people in the Northeastern of Thailand.

Activities

- 1. Science and cultural exhibition.
 - * Planetarium
 - ★ Cultural exhibition
 - ★ Bio science
 - ★ Dinosaurs and pre-historic world and fossils

- * Amazing room
- ★ Bio diversity
- * Astronomy exhibition
- ★ Fun science
- ★ World of plants and environment
- * The wonder of nature
- * Rock salt
- 2. Science and cultural camping such as one-day camp and overnight camp.
 - 3. Education activity
 - ★ Science classroom
 - * Science lab
 - * Scientific phenomena learning such as global warming
 - 4. Academic service
 - * Radio channel
 - * Publications (Brochure, Magazine)
 - **★** Internet

Best Practices

- * Best and modern planetarium in the northeast of Thailand.
- * Modern and interesting building with designs unique to northeastern cultural identity
 - Sticky rice box



- Northeastern farmer equipment
- Northeastern sticky rice cooker
- Fireballs

Opening hours: Mon-Fri from 08.30 – 16.30 hrs (Closed on

public holidays)

Entry fees: To be determined

Contact: 32 M.2 Jaengsanit Road, Niwet, Thawatburi District,

Roi Et 45170

Tel.: (66)43 569 340

Fax: (66)43 569 174

Email: sci 101@hotmail.com

Facebook : http://facebook.com/RSCCE

Website : http://www.101sci.com

13. Sa Kaeo Science Centre for Education

General Background

Sa Kaeo Science Centre for Education was officially opened on 1 April 2002 to serve the science learning needs of eastern provinces: ChonBuri, Rayong, Chanthaburi, Trat, Prachin Buri, Chachoengsao and Sa Kaeo.

Activities

- © Science camp
- © Science show
- Mobile science exhibition, science competition, meeting/ seminar and training
 - © Science Labs

Indoor Exhibitions

- © Basic science exhibition
- © Stars & Life exhibition
- © Communication exhibition
- © The Communication & Information Technology

Outdoor Exhibition

- © Science garden
- © Science garden for health
- © Science lab building



- © Wildlife learning base
- © Dinosaur learning base
- © Solar system learning base
- © Rock garden learning base

Opening hours: Mon-Fri 08.30 – 16.30 hrs (Closed on public holidays)

Entry fees : Free, THB 10 per person for science lab and

training, THB 70-220 per person for science camp

Contact: 597/49 Suwannason Rd., Muang District, Sa Kaeo 27000

Tel.: (66) 37425427 Fax: (66) 37425384

Website: http://sakaeo-science2012.blogspot.com

14. Trang Science Centre for Education

General Background

Trang Science Centre for Education was founded in 1995 in commemoration of the 50th anniversary of HM the King's accession to the throne. Nestled in the embrace of well-preserved nature, the centre is located at approximately 7 kilometres to the south of city centre. The centre also serves Phuket, Phangnga, Ranong and Krabi.

Activities

1. Exhibitions

The centre's exhibitions cover a broad range of themes, including rubber, traditional Trang-styled houses, aeronautics, astronomy and space technology, Father of Thai Technology, local Thai wisdom in scientific dimension.

2. Other Highlights

- Science Show
- Tissue Culture (off-site activity)
- ♦ Water Detective
- Young Meteorologist
- Seashore Detective (off-site activity)
- Mangrove Detective (off-site activity)
- Forest Trekking (off-site activity)



Decoding DNA

Young Geologist

Opening hours: Mon-Fri from 9.00 – 1600 hrs (Closed on

public holidays)

Entry fees: Free

1-day camp: THB 100 per person

2-day camp: THB 150 per person

3-day camp: THB 200 per person

Contact: 12 Kokloe, Muang District, Trang 92000

Tel.: (66) 75 582 303

Fax: (66) 75 582 304

Website: http://www.trangsci.com/

Facebook: http://www.facebook.com/trangsci

15. Nakhon Si Thammarat Science Centre for Education

General Background

Nakhon Si Thammarat Science Centre for Education is situated in Promkiri District of Nakhon Si Thammarat. Its area of service goes beyond that of Nakhon Si Thammarat to include Chumphon, Surat Thani, Phatthalung and Songkhla. It was recognized for outstanding performance as recreational tourist attraction with the 8th Thailand Tourism Award 2010 by Tourism Authority of Thailand, and as The Best Academy under Office of the Non-Formal and Formal Education in 2012. It is the resource of knowledge on science and nature, which provide education about science and environment through exhibitions of basic natural and environmental sciences, astronomy and space, agricultural technology, etc. It focuses on the familiar and touchable matters in our daily life as well as on learning from real materials and practical application of knowledge learned in real life.

Activities & Services

1. Exhibitions

The Centre's indoor and outdoor exhibitions offer a vast array of hands-on informal education experience, allowing



visitors to enjoy the exhibitions on their own. These activities include:

- * Mystery of the Earth Astronomy and Space
- **★** Introduction to Geology
- * Explore exotic nature in limestone mountain
- * Local fish life and Water Cycle
- * Play and Learn in Basic Science
- * Outdoor fun science at Science Park
- **★** Exciting 3D Movie
- * Rice Field Demonstration
- * Child City
- * Science Show
- **★** 3D Art Street

2. Science Camp

Our activities are associated with the nature of Khun-Phanom mountain, Khlong Nok Tha canal and Phrom Khiri community's traditional orchard as a classroom. Life skills and experience are gained through a fun and happy way of science learning. The camp offers 23 activities, revolving around 6 main themes:

- ♣ Play & Learn : Science Show/Math Magic/Stop Global Warming/ Science learning with local Thai toys.
- * Power of thoughts: Inquiry based learning/Walk Rally around Khun Phanom mountain/Discovery Khao Khun-Phanom community/Imagination/Murder investigation

- * Science Workshop : Batik/Tied dye/Rubber learning/Gel candle/Herbal Scent
- ★ Nature Explore (Forest/Rocks/Soil/Water): Stream detective/Cloud Forecasting/ Geology/ Forest structure/Rock climbing/Trekking in Southern Roof Forest/The Adventure
 - * Astronomy and Space
 - * Science for Kids (3-9 years old)

3. Educational Services

These science educational services are delivered in the form of mobile science exhibitions, exhibition bus, science show and so on.

4. Academic Services

The Centre provides knowledge of science and technology to the public through lectures, conferences, training, seminars, multimedia (printed materials, VDOs), science-related articles and e-learning lessons via its website at www.nakhonsci.com.

Opening hours : Mon-Fri from 08.30-16.30 hrs (Closed on public holidays)

Entry fees: THB 10 per person

THB 120 per person for 1 day camp

(2 activities,1 meal)

THB 470 per person for 2 days 1 night camp

(4 activities, 4 meals)

THB 730 per person for 3 days 2 nights camp (6 activities, 6 meals)

Contact: Moo 3, Bankor, Phromkiri District, Nakhon Si Tham-

marat 80320

Tel.: (66) 75 396 363 (ext.15)

Fax: (66) 75 396 363

Email: nsc_camp@hotmail.com

Website: www.nakhonsci.com

16. Yala Science Centre for Education

General Background

Yala Science Centre for Education was established in 1997 to serve the science learning needs of people in the Far South of Thailand. It also serves people in the southern provinces: Narathiwat, Pattani and Satun.

Activities

1. Exhibitions

The centre offers learning activities through modern and attractive multimedia exhibitions covering science, technology and environment. These permanent, temporary and mobile exhibitions allow visitors can actively participate in the activities to find out answers to their questions.

2. Science Camps

Day - and overnight – science camps (1-3 days) encourage visitors to exchange their knowledge and experience, to develop the capacity as well as positive attitude towards learning science, technology and environment, and to gain experience and skills for group living and teamwork.

3. Other Highlights

Herbal balm workshop

© Soilless Culture

Opening hours: Mon-Fri from 9.00 – 1600 hrs (Closed on

public holidays)

Entry fees: free

Contact: 1/29 Sateng, Muang District, Yala 95000

Tel.: (66) 73214920

Fax: (66) 73 216 755

Website: http://www.yalasci.com/

http://www.facebook.com/yala.sci



Eyeing the Earth through the eye of THEOS a Science Centre for Education (Ekamai)

The charm of lime
battery

a Science Centre for
Education (Ekamai)

Exhibition "Vanished Species" @ Rangsit Science Centre for Education

Early encounter with science @ Science Lab by Rangsit Science Centre for Education



V for "Very fun" at 4-D theatre experience @ Kanchanaburi Science Centre for Education



Stargazing through a telescope

(a) Kanchanaburi Science Centre for Education



The Magic of Science @
Phra Nakhon Si Ayutthaya
Science Centre
for Education





Knowledge and experience get along hand-in-hand. @ Science Camp by Nakhon Ratchasima Science Centre for Education

Queuing for a microscopic glimpse @ Nakhon Ratchasima Science Centre for Education



Curiosity never
kills the cat;
contamination can.

@food contamination testing by
Ubonratchathani
Science Centre
for Education



กเกริกเกรตินี้ยาเกาสตรีเพื่อการกิกเล





On-site and outreach science experiences @ Samut Sakhorn Science Centre for Education



Upclose and personal with a dinosaur@ Sakaeo
Science Centre for Education



Insect ecology exhibited and explained @ Khon Kaen
Science Centre for Education



Water detectives

@ Trang Science Centre for
Education



Celestial happenings unveiled

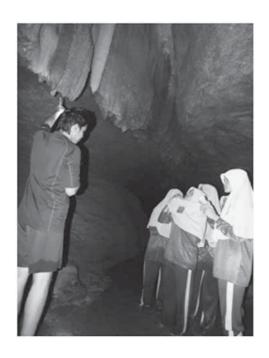
a Yala Science

Centre for Education



Fish feeding in aquarium

(a) King Mongkut Memorial Park of
Science and Technology at Waghor



Cave & stalactites
explored @

Nakhon Si Thammarat
Science Centre for
Education



Getting new insights into microscopic level

a Lampang Science Centre for Education





Chemistry laboratory experience

a Kanchanaburi Science Centre for Education





Science show

a Nakhon Sawan

Science Centre

for Education

Seeing the world
through the lens
of science
and Et Science
and Cultural Centre
for Education





Science wonders within easy reach

a Sa Kaeo Science Centre for Education

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