

# A short Summary of Children's Universities in Sweden

## Swedish primary schools

In Sweden the population is 9,8 million living in 290 municipalities. Education in Sweden is mandatory for all children between age 7 and age 16. The number of pupils in primary schools continues to increase for several years with small pupil cohorts. In the academic year 2014/15 went nearly 950,000 pupils in compulsory education, an increase of just over 28,500 students from the previous academic year. According to current forecasts, the number of students continues to increase to nearly 1,034,000 pupil's school year 2020/21.

In Sweden municipalities are responsible for primary schools. In the academic year 2014/15 there were 4040 municipal school units, 5 Sami school units and 800 independent school units at the primary level. The majority of primary school pupils attend public schools.

In primary school, there are over 90,000 teachers. Nine out of ten have a teaching degree. It is about 12 students per teacher in elementary school. Municipal schools have a slightly higher staffing ratio compared to independent schools.

In Sweden there are at least two non-profit organizations that could be named as part of the Swedish Children's Universities, namely "Science Centers in Sweden" and "Snilleblixarna".



## Science Centers in Sweden [www.fssc.se](http://www.fssc.se)

There are over 3 000 Science Centers in the world, and in Sweden there are 18 Science Centers. Science centers are science museums open to the public that emphasize a hands-on approach, featuring interactive exhibits that encourage visitors to experiment and explore. The Science Center's in Swedish has 2 million visitors per year, of which 315,000 are school pupils and 30,000 are teachers.

These 30,000 teachers are trained, and takes part of the Science Center's scientific approach. The base concept requires: common set of values, it must be scientifically based, and accessible to the public. This is also reflected in the statutes for the Swedish Science centers.

*"Touch a scientist, and you touch a child." Ray Bradbury*

*"Science centers recognize that the three pillars of interactive science engagement are science knowledge, hands-on interaction, and dialogue and the co-creation of experiences with scientists and the public." [From Cape Town-deklarationen 2011](#)*



Balthazar  
[www.balthazar.nu](http://www.balthazar.nu)

**BALTHAZAR**  
SCIENCE CENTER

Dalénium  
[www.dalenium.com](http://www.dalenium.com)

  
**Dalénium**  
SCIENCE CENTER

Fenomenalen  
[www.fenomenalen.se](http://www.fenomenalen.se)

**FENOMENALEN**  
Science Center på Gotland

Fenomenmagasinet  
[www.fenomenmagasinet.se](http://www.fenomenmagasinet.se)

  
**fenomen  
magasinet**

Framtidsmuseet

[www.framtidsmuseet.se](http://www.framtidsmuseet.se)



Innovatum Science Center

[www.innovatum.se](http://www.innovatum.se)

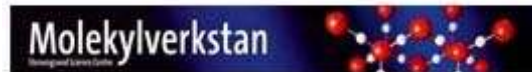
Kreativum

[www.kreativum.se](http://www.kreativum.se)



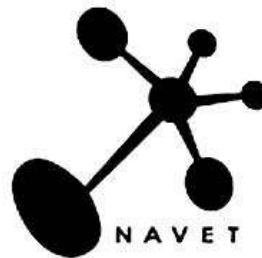
Molekylverkstan

[www.molekylverkstan.se](http://www.molekylverkstan.se)



Navet

[www.navet.com](http://www.navet.com)



Science Center Malmö

[www.malmo.se/sciencecenter](http://www.malmo.se/sciencecenter)



Technichus

[www.technichus.se](http://www.technichus.se)



Teknikens hus

[www.teknikenshus.se](http://www.teknikenshus.se)



Tekniska museet

[www.tekniskamuseet.se](http://www.tekniskamuseet.se)



**Tom Tits Experiment**

[www.tomtit.se](http://www.tomtit.se)

*Tom Tits  
Experiment*

**Universeum**

[www.universeum.se](http://www.universeum.se)



**Upptech**

[www.upptech.se](http://www.upptech.se)



**Vattenhallen**

[www.vattenhallen.lth.se](http://www.vattenhallen.lth.se)



**Visualiseringscenter C**

[www.visualiseringscenter.se](http://www.visualiseringscenter.se)



Sweden's 18 science centers:

- Stimulates interest in technology, science and entrepreneurship to meet future societal challenges.
- Create unique learning opportunities so that all children and young people have the opportunity to find and develop their abilities.
- Provides an informal forum for discussion between the public, schools, labor and academia, which creates reflection and new perspectives.
- All 18 Swedish science centers collaborating with the local and regional schools, companies, universities / colleges and organizations.
- Science centers annually receives more than 2 million visitors, of whom 315,000 are students who participate in school programs, from most of the municipalities.
- Science centers soon form more than 30 000 teachers and educators in engineering, science and mathematics annually.

- The Agency reviews all science centers operations and quality.

The number of science centers is increasing worldwide. Business is growing, for example in Norway, the UK, India, China and South Korea, where they choose to prioritize investments in science centers as key meeting places. All aimed to stimulate interest, increase knowledge on science and technology to attract new innovators. The largest networks are found here in the table:

<b>NSCF</b>	<a href="http://www.nordicscience.net">www.nordicscience.net</a>	<i>Nordic Science Center Association</i>
<b>ECSITE</b>	<a href="http://www.ecsite.eu">www.ecsite.eu</a>	<i>European network of science centers and science museums</i>
<b>ASTC</b>	<a href="http://www.astc.org">www.astc.org</a>	<i>Association of Science Technology Centres</i>
<b>ASPAC</b>	<a href="http://www.aspacnet.org/ns">www.aspacnet.org/ns</a>	<i>Asia Pacific Network of Science &amp; Technology Centres</i>



## **Snilleblixarna - "Flashes of Genius" [www.snilleblixarna.se](http://www.snilleblixarna.se)**

What is "Flashes of Genius"? "Flashes of Genius" in Sweden uses a method of training that is primarily intended for teachers who work with children from preschool to grade 5, but also for recreation and teachers at special schools. The methodology aims to encourage entrepreneurial learning, primarily for technology, science, invention and entrepreneurship at the same time as creativity, initiative and self-reliance encouraged. Curiosity and desire to learn is also a result. "Flashes of Genius" works well regardless of the learning style of children, and for children with concentration problems. It has also been shown that migrant children learn language faster. 60 of the Swedish 290 municipalities are members of the organization "Snilleblixarna".

[www.youtube.com/watch?v=UXgMDFSvycA](http://www.youtube.com/watch?v=UXgMDFSvycA)

## Events



**2015-11-28 Dome of Visions.** Over 100 people including children participated in the event that took place during 3 hours on a rainy Saturday in Stockholm.