

## Educational buildings

### History

#### Ancient period

- Greek scholé = pleasant activity
- Dedaskaleion = elementary school
- Gymnaseon = grammar school
- Academia study of philosophy, medicine, retory

#### Middle ages

- cloisters, monasteries
- university = unification of teachers and students = democracy
  - cloister space form type
    - Bologna 1088.
    - Paris Sorbonne 1100
    - Oxford University, around 1200
  - urban integrated type
    - Erfurt, Germany 1379
- college (with dormitories)
  - Oxford
  - Cambridge

#### 18-19th century

- hall schools (Britain)
- year classification schools (Germany)

#### 20th century

- nursery
- kindergarten
- college
- special schools

### Types

- |                             |               |
|-----------------------------|---------------|
| - nursery                   | 0-3 years age |
| - kindergarten              | 3-6 years     |
| - primary/elementary school | 6-10/14 years |
| - secondary/grammar school  | 14-18 years   |
| - college, university       |               |
| - special training schools  |               |

## Nursery

day-care of babies and infants

Design theory

- strict hygienic requirements
- terrace and garden needed
- orientation

## Kindergarten

infant - 3-4 years age

toddler - 5-6 years age

preschool - 6-7 years age

Design theory

Classroom

- multifunction area (training, playing, eating, nepping)
- home based design
- hygiene
- safety
- orientation

## School

Space arrangements

- one-side corridor - linear (Prussian, German type)
- mid corridor - pavilion like
- centralised - with aula
- clustered (Anglo-Saxon type)

Design theory

Classrooms

- passive education (directed, lecture type)
- active room (non-directed, democratic space, workshop)

Efficiency of lighting

Orientation

Adjustment of sport hall

## Samples

- Technical University Helsinki, Otaniemi Campus, 1966. Alvar AALTO
- Elementary school, Høje Taastrup, 1981. Henning LARSEN
- American School, Budapest, 1987. Ferenc CALLMEYER
- Rákóczi F. Secondary school reconstruction, Budapest, 2006. Ferenc KELLER
- Primary school, Fót, Hungary, 2008. András KERTÉSZ
- Bóbita Kindergarten, Törökbálint, Hungary, 2010. Mihály BALÁZS
- Youth Centre, Nlafourang, Senegal, 2011. Hans Skotte + TYIN Tegnestue
- Childcare facilities in Boulay, France, 2012., Paul le QUERNEC
- Mesés kert Kindergarten, Budapest 13. 2015. ARCHIKON
- Sütöde Kindergarten, Budapest 10. 2015 Tijana DIMITRIEVICS, Melinda BORSOS

## **Sport facilities**

### Categories 1.:

- for amateur sport
  - sport field - flexible use
  - fitness area
  - service and social rooms
- for professional sport
  - sport field
  - warm-up facilities
  - fitness area
  - service and social rooms
  - pr and club rooms
  - spaces for visitors - strict safety regulations
  - grand stand
  - huge parking plots - temporary used
- regional complexes
  - multi-sport facilities
  - club area
- technical race fields
  - large facilities
  - strict safety rules
  - huge parking plots - temporary used

### Categories 2.:

- in-door facilities
- out-door facilities
  - urban
  - in the nature

### Categories 3. - according to sport arts

- ball sports
- ice sports
- gym
- water sports
- technical sports
- extreme sports
- winter sports
- horse sports
- athletics

## History

first Olympic games Greece 776 BC

- stadion (for athletics)
- hyppodromos (for horse race)

Ancient Rome

- therme - combination of spa + gymnasium

Middle Ages

- bullfight arena (rather a circus)
- temporary (open-air) facilities

19th Century

- horse race fields

20th Century (start of professional sport)

- stadiums
- sport halls
- summer olympic facilities, villages
- winter olympic facilities, villages
- fitness, wellness facilities
- sport fields
- race fields
- extreme sport facilities

21st Century

- multi-purpose sport facilities  
combination of sport, social and cultural functions

## Samples

- Palazzo dello Sport, Rome, 1958. Pier L. NERVI
- D. Ingalls Skating Rink, New Haven, 1958. Eero SAARINNEN
- Olympic facilities Tokyo, 1964. Kenzo TANGE
- Olympic facilities Munich, 1972. Otto FREI, Günther BEHNISCH
- Therme, spa, Valls, Switzerland, 1996. Peter ZUMTHOR
- Finish tower, Kayak arena, Győr, 1999. Csaba S. ROSTA
- Budapest Sportarena, 2003. György SKARDELLI
- Olympic stadium Beijing, 2008. HERZOG + de MEURON
- National Aquatics Center Beijing, 2008. PTW ARCHITECTS
- Sport hall, Podcertrek, Slovenia, 2010. ENOTA Architects
- Olympic Aquatic Centre, London, 2012. Zaha HADID
- Multi-functional sports hall, Ljubljana, Slovenia, 2012. SADAR+VUGA
- Solar Powered Stadium, Kaoshiung, Taiwan, 2012. Toyo ITO