

HUNGARIAN STUDENTS' PERFORMANCE IN INTERNATIONAL COMPARISON



Welcome to the conference participants!

We are from Hungary, from Pécs

We are proud that we are one of the participants in the SMART project

We have partner school connection with Carlo Anti Secondary School from Villafranca di Verona for almost a decade

Our common economic work experiences are: two successful international project (Comenius, Leonardo)

Our national public education system is changing

The international measurement results of our students are poor by international standards

We search for new ways and methods for the effective teaching of Mathematics, Sciences

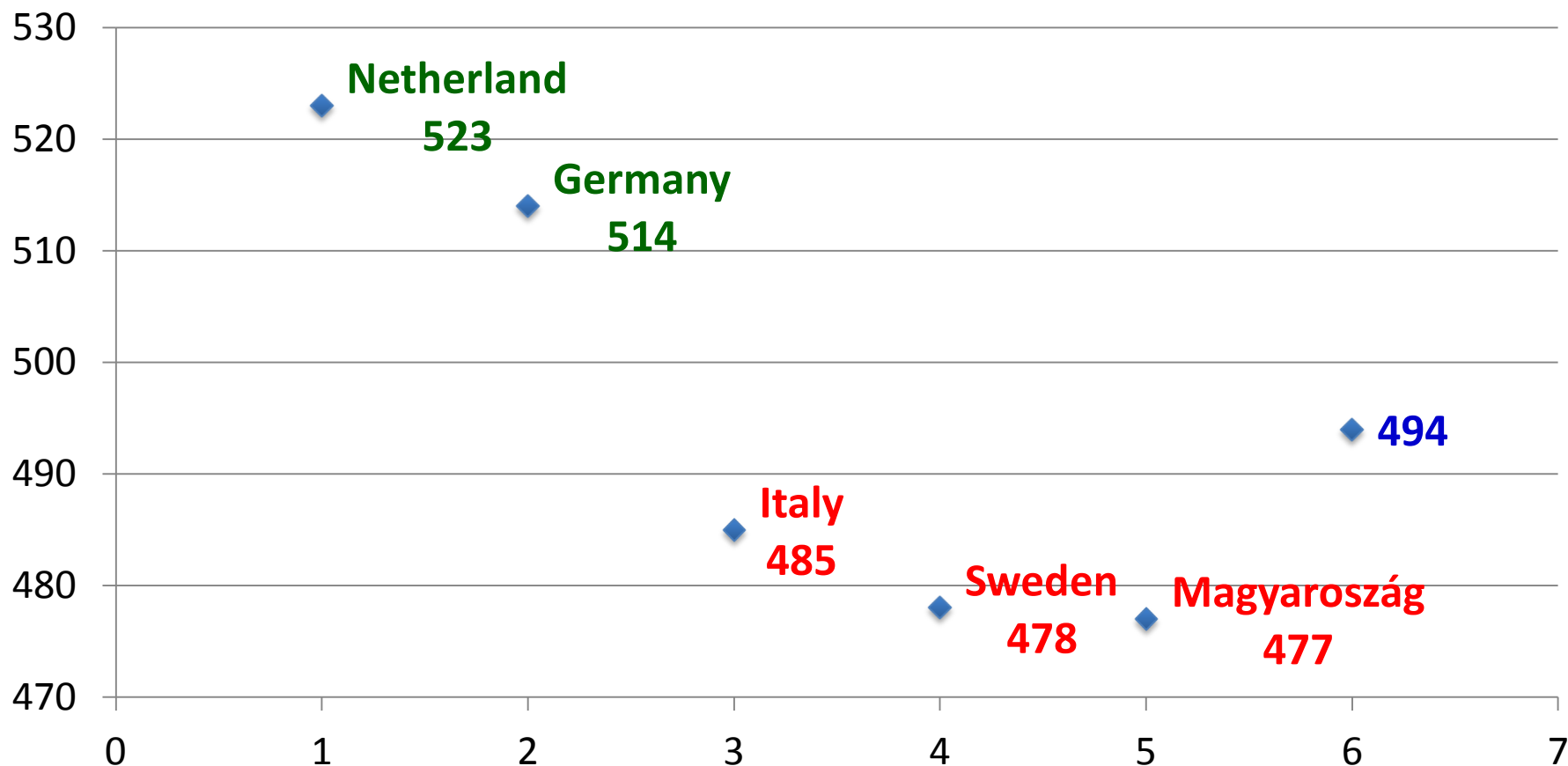
Results of PISA Surveys (2012) in Mathematics [368; 613]

Netherlands →	Hollandia	523	(3,5)	▲	3	7	9	14
Germany →	Németország	514	(2,9)	▲	6	10	13	17
Italy →	Olaszország	485	(2,0)	▼	22	27	30	35
Sweden →	Svédország	478	(2,3)	▼	26	29	35	40
Hungary →	Magyarország	477	(3,2)	▼	26	30	35	40

Based on the results of the PISA surveys, Hungary belongs to the participants in midfield; statistically significantly lower than the OECD average. OECD average: 494 points.

Position on the basis of the results

[368; 613; average: 494]



The results of the International Olympiad

(from 1968 to 2014, the young geniuses of Mathematics, Physics, Chemistry subjects)

RESULTS OF HUNGARIAN TEAM

	Mathematics	Physics	Chemistry
1st place	6	3	3
2nd place	8	3	2
3rd place	6	5	6

HUNGARIAN ABSOLUTE 1ST PLACES

	Mathematics	Physics	Chemistry
1st place	4	5	4

ORGANIZED IN HUNGARY

Mathematics	Physics	Chemistry
3	2	4

Pride of Pécs:

Attila Szabó

Student in Pécs, who acquired the absolute first place in the International Physics Olympiad in 2013 and in 2014 as well; with this performance he is a recorder.

Nobel prize winners of Hungarian origin

(in Sciences and Medicine)

YEAR	NAME	FIELD
1905	Fülöp Lénárd	Physics
1914	Róbert Bárány	Medical
1925	Richárd Zsigmondy	Chemistry
1937	Albert Szent-Györgyi	Medical
1943	György Hevesy	Chemistry
1961	György Békésy	Medical
1963	Jenő Wigner	Physics
1971	Dénes Gábor	Physics
1986	János Polányi	Chemistry
1994	György Oláh	Chemistry
2004	Ferenc Herskó	Chemistry

Pécs - First university town in Hungary

The first university in Hungary was founded in Pécs.

Pope Urban 5th in his charter dated 1 September 1367 he granted Hungarian king, Louis the Great, the founding of a university in Pécs



„At the request of the King of Hungary we decree to be a studium generale in the city of Pécs, in which the ecclesiastical and civil law and everything else which is not forbidden sciences are taught, in addition to theology...

(part of the founder Pope Urban 5th)

UNIVERSITY OF PÉCS

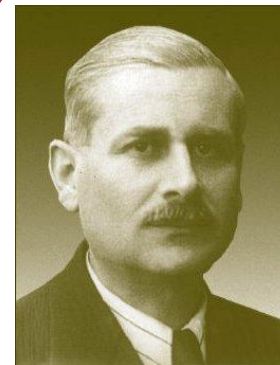


In **1921**, the Hungarian National Assembly finally passed the law that temporarily moved the University from Pozsony (today Bratislava, capital of Slovakia) to Pécs after the Treaty of Trianon . In 1920 the territory of Hungary was reduced to one-third of its original one. Due to the city being under Serbian occupation the start was only in 1923. In 1923 the university had already four faculties: law, medicine, philosophy and protestant theology.

Today there are 10 faculties, over 21,000 students, of which more than 2,000 are foreign students.

Pécs famous mathematicians, scientists

Tivadar Millner (Pécs, 7 March, 1899. – Budapest, 28 October, 1988.)
Hungarian chemical engineer, a member of the Hungarian Academy of Sciences. He took part in the development of dimensionally stable tungsten filament.



Lipót Fejér (Pécs, 9 February, 1880. – Budapest, 15 October, 1959.)
Hungarian mathematician, a member of the Hungarian Academy of Sciences. Awards: Corvin Wreath (1930), Kossuth Prize (1948)

János Kollár (Pécs, 3 November, 1945. – Budapest, 13 January, 2011.)
Hungarian physicist, member of the Hungarian Academy of Sciences. His main research area was the solid-state physics.



More than 100 years public education, vocational training in: PÉCSI RADNÓTI MIKLÓS ECONOMIC SECONDARY SCHOOL

The predecessor our school, Pécs City Women's High School of Commerce opened its doors to the students on 1 September, 1912.

Our school is one of the best and most respected business vocational school in Pécs.

Our professional profiles are: **business** (economics, finance, logistics, marketing, **IT**) and **management**.

High level of mathematic competence is needed in each profile.



Weekly hours per grade in Science and Human subjects in our school from September, 2013.

	9.	10.	11.	12.
Mathematics	4	4	4	4
Physics	2	2	1	-
Chemistry	2	1	-	-
Geography	2	1	-	-
Biology	-	2	2	1
Sciences (total)	10	10	7	5
Informatics	2	2	-	-
Human	7	6	8	7
Foreign languages	4	4	6	6

Changes in the public education and teacher training from 2013

- State management
- New National Basic Curriculum
- New textbooks
- Introduction of new teaching methods
- Laboratory improvements

Instead of the Bologna education system, the **traditional teacher training** (undivided training specialized on 2 major subjects) is restored from 1 September, 2014.



We are confident that during the implementation of the project we will learn and test some methods in effective teaching of Mathematics and Sciences that can be used effectively in the Hungarian education system as well.

Thank you for the opportunity Carlo Anti!