



Bebras Conference



Informatics at the School
Switzerland

Vilnius, 15.05.2011



efi



Ergänzungsfach Informatik an Gymnasien



Content

History of Informatics at Swiss *Gymnasium*

Role of Hasler Foundation

Brief description of Swiss Education System

Teacher Training program (FIT)

Parallel Activities and Figures

Teaching informatics - *a personal experience (Ivo Blöchl*

Informatics in Swiss Upper Secondary Schools

1986 Informatics is an obligatory subject in Swiss Upper Secondary Schools (Content: Programming -> ICT)

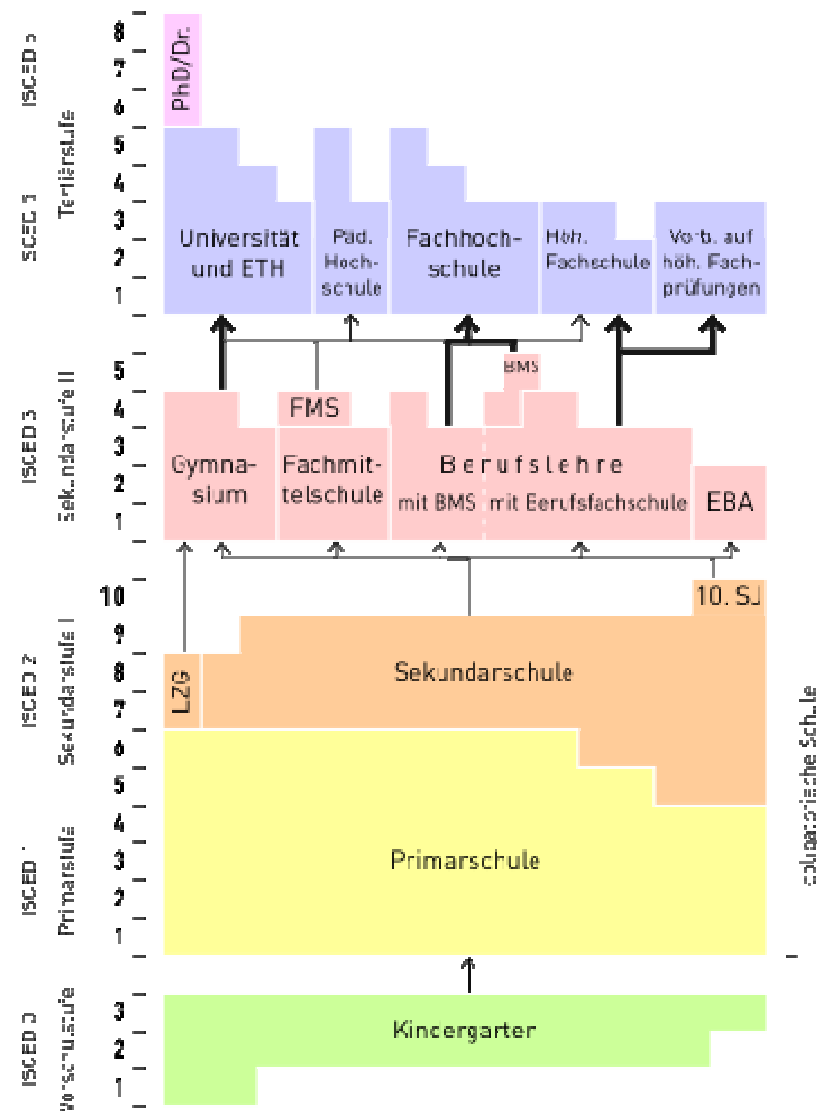
1995 New Law - informatics disappear and ICT should be integrated in other subjects

2007 Informatics is re-introduced as an optional subject in the last Revision of the Federal Maturity Law (MAR)

(Content: algorithms and programming, internet and multimedia, databases and information systems)

2008 Start of EFI - Train the Teacher program (*Gymnasium*)

Swiss Education System



LZG: Lang Zeit Gymnasium

— Role of the Hasler Foundation

The purpose of the foundation is to finance or co-finance carefully selected education and research projects in the area of information and communications technology (ICT), with the purpose of contributing positively to the intellectual and economic development of Switzerland.

FIT - Fit in IT (2006 - 2015)

The main goal of FIT is to introduce Informatics in High Schools as a mandatory subject.

FIT is an encouragement program from the Hasler Foundation, aiming to

- Increase the ICT standard in Swiss Schools
- Increase the ICT teachers' education standard
- Promote learning materials

Teacher Training program to re-introduce informatics

MAS (70 Credits) and CAS (22 Credits) Curriculum

Studied Subjects	Basic	Application	Trends
SF: Algorithm and Programming	4	4	2
SF: Internet and Multi Media	4	4	2
SF: Data Bases /Information Systems	4	4	2
WF: Robotics	2	2	
WF: Simulation	2	2	
WF: Visualisation	2	2	
WF: Computer Games	2	2	
WF: Theoretical Informatics	2	2	
Didactics	10		
Master Thesis	10		

Teachers' profile



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50 % from Mathematics and Physics

20 % Natural Science

15 % Humanities

10 % Sports

5 % Languages

Parallel Activities

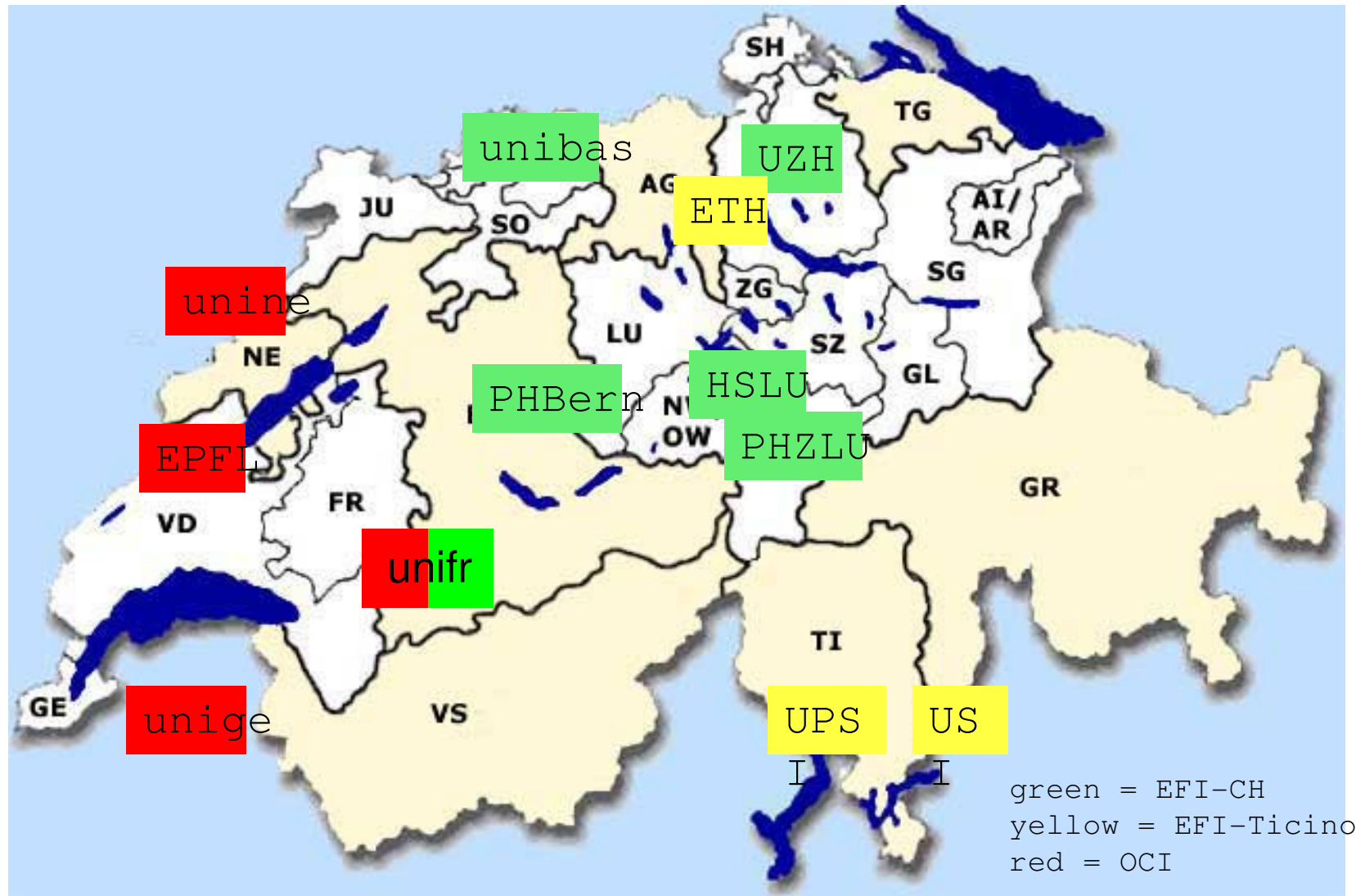
Networking between teachers

Development of teaching materials

Road Show to promote Informatics at schools

Introducing the Bebras Contest (2010)

EFI Corporation



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Trained teachers until 2011

	CAS	DAS	MAS	Gesamt
Deutschschweiz (EFI-CH)	19	7	32	58
Romandie (OCI)		10		10
Tessin (EFI-CH)		10		10
Gesamt EFI	19	27	32	78
Deutschschweiz (ETH*)	9		2	11
Romandie (EPFL*)	31			31
Insgesamt	59	27	34	120

*) Partly financed through Hasler Foundation.

Schools introducing informatics

Schools Year	planed starting	starting	introduced EFI total	from cantons
2008/09	27	26	26	AG, BE, GR, JU, LU, SO, TG, VS, ZH
2009/10	42	37	63	BL, BS, FR, GE, NE, SG, ZG
2010/11	35	41	104	AR, NW, SZ, TI, VD
2011/12	10	10	114 (of 121)	GL, UR

Uncertain situation in AI, OW, SH, and some schools in other cantons.

Networking

SSII - Società Svizzera per l'Informatica nell'Insegnamento

<http://www.svia-ssie.ch/>

Homepage EFI-CH

<http://www.inf-efi.ch>

Homepage Romandie

<http://www.oci.ch>

Homepage Tessin

<http://www.idsms.supsi.ch/index.php/>