

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Bieber, Tonia

#### **Working Paper**

Convergence through communication and competition? The internationalization of secondary and higher education policies in Switzerland

TranState Working Papers, No. 147

#### **Provided in Cooperation with:**

University of Bremen, Collaborative Research Center 597: Transformations of the State

Suggested Citation: Bieber, Tonia (2011): Convergence through communication and competition? The internationalization of secondary and higher education policies in Switzerland, TranState Working Papers, No. 147, Universität Bremen, Collaborative Research Center 597 - Transformations of the State, Bremen

This Version is available at: https://hdl.handle.net/10419/45020

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





# TranState Working Papers

Convergence through COMMUNICATION AND COMPETITION? THE INTERNATIONALIZATION OF SECONDARY AND HIGHER EDUCATION Policies in Switzerland

TONIA BIEBER

Universität Bremen • University of Bremen

Jacobs Universität Bremen • Jacobs University Bremen

Universität Oldenburg • University of Oldenburg

- Staatlichkeit im Wandel Transformations of the State
- Sonderforschungsbereich 597 Collaborative Research Center 597

Tonia Bieber
Convergence through Communication and Competition?  The Internationalization of Secondary and Higher Education Policies in Switzerland
TranState Working Papers
No. 147
Sfb597 "Staatlichkeit im Wandel" – "Transformations of the State" Bremen, 2011 [ISSN 1861-1176]

### **Tonia Bieber**

Convergence through Communication and Competition? The Internationalization of Secondary and Higher Education Policies in Switzerland

(TranState Working Papers, 147)

Bremen: Sfb 597 "Staatlichkeit im Wandel", 2011

ISSN 1861-1176

Universität Bremen

Sonderforschungsbereich 597 / Collaborative Research Center 597

Staatlichkeit im Wandel / Transformations of the State

Postfach 33 04 40

D - 28334 Bremen

Tel.:+ 49 421 218-8720

Fax:+ 49 421 218-8721

Homepage: http://www.staatlichkeit.uni-bremen.de

Diese Arbeit ist im Sonderforschungsbereich 597 "Staatlichkeit im Wandel", Bremen, entstanden und wurde auf dessen Veranlassung unter Verwendung der ihm von der Deutschen Forschungsgemeinschaft zur Verfügung gestellten Mittel veröffentlicht.

Deutsche Forschungsgemeinschaft



# Convergence through Communication and Competition? The Internationalization of Secondary and Higher Education Policies in Switzerland

#### **ABSTRACT**

Far-reaching transformations in Swiss education were pushed in the last decade by two prominent international initiatives, namely the 1999 Bologna process and the OECD's PISA study starting in 2000. To what extent and in which way were these soft governance initiatives able to trigger Swiss policy convergence towards their policy models? Drawing on convergence approaches, it is assumed that mechanisms of transnational communication and regulatory competition acted as driving forces of the Swiss reform wave in the last decade. Results show that Swiss secondary education policy exhibits a considerable level of convergence towards the OECD recommendations based on the PISA results, and that reforms in Swiss higher education highly conformed to the Bologna aims. While different communicative mechanisms furthered policy convergence in Swiss secondary and higher education towards the international models of the PISA study and the Bologna process, in both cases regulatory competition was highly effective in promoting domestic reforms. Applying qualitative methods of expert interviews and document analysis, this paper contributes to research on policy convergence. It fills the research gap concerning the role of the newly emerged, but ever more influential education-political actors of the OECD and the EU as promoters and of domestic actors as both supporters and antagonists of convergence.

**KEYWORDS**: Bologna process, EU, OECD, PISA study, policy convergence, Switzerland

# **CONTENTS**

1	INTRODUCTION	l
2	THEORIZING MECHANISMS OF POLICY CONVERGENCE	3
3	SWISS SECONDARY EDUCATION – DRAWING CONCLUSIONS FROM PISA'S REVELATIONS	7
	3.1 OECD Recommendations and Swiss Convergence	7
	3.2 Convergence Mechanisms of the PISA Study	10
4	Swiss Higher Education – Integration into Bologna's Network	13
	4.1 Bologna Aims and Swiss Convergence	14
	4.2 Convergence Mechanisms of the Bologna Process	18
5	Comparative Conclusion of Policy Sectors	21
R	EFERENCES	24
Li	ST OF ABBREVIATIONS	30
В	IOGRAPHICAL NOTE	31

# Convergence through Communication and Competition? The Internationalization of Secondary and Higher Education Policies in Switzerland

#### 1 Introduction<sup>1</sup>

article.

Internationalization is a rather new phenomenon in the policy field of education. Two intergovernmental initiatives are in the center of current political interest. For secondary education (SE), the PISA study has triennially been assessing the performances of 15-year-old students in all OECD countries and beyond since the year 2000. From the results, the OECD has derived diverse policy recommendations such as school autonomy, teaching quality and educational standards. The Bologna process of 1999 aims to create a unitary European Higher Education (HE) Area by 2010 including standardized structures of Bachelor, Master and doctoral studies, quality assurance (QA), mobility programs and others (Bologna Declaration 1999). Implementation of these two initiatives' goals at the national level is not binding according to international law as education has always been a field which is closely related to the nation-state (Goldthorpe 1997: 1; Enders 2004: 361; Furlong 2005: 53) and in which international organizations only have means of soft governance at hand in order to exert influence on countries. This makes national policies' convergence towards international models in education rather doubtful.

A country that is particularly interesting for assessing processes of convergence is Switzerland. On the one hand, a few facts demonstrate the strong impact of internationalization on Switzerland. Economic cooperation plays a central role for Switzerland's small open economy, as its membership in the WTO, the OECD, the EFTA and other organizations shows. Even though it is not a member, it is highly influenced by the EU: Direct Europeanization is expressed by bilateral agreements (EDA and EVD 1999; 2004), turning Switzerland into a quasi-EU member (Kriesi and Trechsel 2008: 187).

The research presented in this paper is part of a research project on International Education Politics conducted at the University of Bremen, Germany. http://www.sfb597.uni-bremen.de/pages/forProjektBeschreibung.php? SPRACHE=en&ID=14 [29.01.2011]. The aim of the project is to explore new international dynamics in educational politics and their effects on states and individuals based on comparative case studies of Switzerland, Germany, England, and New Zealand. Research for the project is conducted under the framework of the Collaborative Research Center "Transformations of the State", funded by the German Research Foundation (DFG). For assistance in preparing this paper, I would like to thank Maximilian Hohmann and Merrit Oldenburg. I am also grateful to the anonymous reviewers of the Collaborative Research Center for their constructive comments on this

Indirect Europeanization occurs via unilateral adaptation (autonomer Nachvollzug) of Switzerland to the acquis communautaire and furthers its Euro-compatibility on a voluntary basis (cf. Lavenex 2006). On the other hand, its political system is prone to account for comparatively slow change: a high degree of institutional power fragmentation due to subsidiary principles, consensual and direct democracy and federalism (Obinger 1998; Bonoli 1999: 165) may aggravate domestic decision-making and cooperation with other countries or international organizations (Armingeon 1999: 465-466; Bonoli and Mach 2000; Trompenaars 2006: 265). This is impressively demonstrated by the backlog of Swiss education reforms from the 1980s until the mid-1990s.

Considering this particular situation, the present study aims to analyze how Switzerland relates to the recent international change processes in education, leading to the following research questions: (1) In which dimensions and to which extent did Swiss SE and HE policies converge towards the international models of PISA and Bologna? (2) Which underlying mechanisms furthered, and which hindered policy convergence? Recent research has rarely dealt with these issues. Education is the stepchild of policy analysis, in particular regarding internationalization and convergence<sup>2</sup> processes (Cibulka 1994: 105; Criblez and Osterwalder 2004: 7; Jakobi, Martens, and Wolf 2009). Systematic research on the effects of the PISA study on national education reforms is rare (Martens and Wolf 2006: 147), and does not often consider Switzerland (Bieber 2010b). Many studies are in the field of pedagogic science (Fthenakis 2003); and some sociological studies assess factors that influence educational achievements such as matters of equity (Wolter and Vellacott 2002). Studies on the effects of the Bologna process on national reforms are more numerous, particularly regarding its aims of mobility as well as Bachelor and Master programs (Witte 2004). However, qualitative research on policy convergence towards the ensemble of Bologna aims is uncommon and rarely focuses on the underlying causal mechanisms triggering convergence (Witte 2006; Dobbins 2008; Martens et al. 2010).

This research gap is to be filled by the present comparative case study, which intends to identify and explore the mechanisms that trigger policy convergence using the example of Swiss SE and HE. The two policy sectors are comparable as both qualify youths for the labor market and are subject to cantonal authorities in Switzerland, except for the Swiss Federal Institutes of Technology. Process tracing is applied as it is regarded as the unrivaled method for case studies to find the causes of a phenomenon by reconstructing

Research on European integration deals with the Bologna process (Fuchs, Linde, and Reuter 2003; Corbett 2006; Reinalda 2008), but cannot be applied to the PISA study that even reaches beyond the OECD world. Compliance research primarily addresses the fulfilment of commonly stipulated aims, which again is only suitable for analyzing the Bologna case, not PISA.

policy-making processes (Schimmelfennig 2006: 266). The research period from the mid-1990s until 2010 enables to trace back national change processes to their sources and thus to establish causation. Data were gathered by means of semi-structured expert interviews and document analysis, and were subjected to qualitative content analysis. Expert interviews are known to be a particularly suitable method in the social sciences for gaining qualitative information (Froschauer and Lueger 2003; Mayer 2004). Between March 2008 and March 2010, thirty-five experts who were directly involved in education-political developments were questioned, such as political and administrative actors, social partners and scientists in Switzerland, and the Directorate-General for Education and Culture of the European Commission. The non-reactive instrument of document analysis served to reliably capture developments in the two policy sectors. In order to explain current changes in education policy, documents issued by institutions responsible for education were selected with regard to their importance for the political process.

The present paper starts with a framework to theorize the phenomenon of policy convergence based on approaches of convergence and veto players. Chapters 3 and 4 provide the empirics on the cases of PISA and Bologna in Switzerland. In the respective first section, I present the two international models and evaluate to what extent reforms in Swiss SE and HE exhibit convergence. In the respective second section, I analyze the processes that led to the specific patterns of convergence in the two policy sectors. The final chapter compares and discusses results of the two educational sectors in light of theoretical considerations.

#### 2 THEORIZING MECHANISMS OF POLICY CONVERGENCE

The theoretical framework for assessing the approximation of national education policies towards international models is based on convergence approaches (Knill 2005) and the veto player theorem (Tsebelis 2000). While the former are regarded as particularly suitable because they provide mechanisms based on soft governance, which may be able to explain convergent processes in the policy field of education, the latter considers domestic political institutions that may filter the impact of exogenous factors.

Convergence approaches investigate the development of increasingly similar national policies within a distinct period of time and the consequential exhibition of characteristics and objectives that are shared by societies in the entire world (Meyer 2005). The notion of convergence is often used for the approximation of policies of several countries. This study, however, focuses on the convergence of a single country's policies towards a specific international model. This kind of policy change is described by the

concept of delta-convergence<sup>3</sup> that occurs on the vertical level (Heichel et al. 2008: 83). The OECD publications on PISA as well as the Bologna declaration and its follow-up communiqués serve as reference points for measuring the degree of delta-convergence of Swiss SE and HE policies towards the international models. The policy dimensions on which convergence may occur are output, outcomes, style, process, and content (Bennett 1991: 418; Holzinger and Knill 2008: 35). I assess the dimension of policy output<sup>4</sup> that refers to the legislation adopted by governments (Holzinger and Knill 2008: 31; Holzinger, Knill, and Sommerer 2008: 563).

The present study argues that voluntary international initiatives may spread their orientations through diverse soft governance mechanisms and thus produce convergence towards their policy models. Thus, I concentrate on mechanisms causing "voluntary convergence" (Sommerer, Holzinger, and Knill 2008: 185), namely transnational communication and regulatory competition (Table 1)<sup>5</sup>. These do not exclude each other; rather, they should be regarded as complementary.

The concept of transnational communication refers to exchange of information and communicative processes in transnational expert networks (Knill and Lenschow 2005: 600). It is evaluated by assessing the engagement and contribution of national policy makers and organizations in transnational networks, international conferences and meetings. Transnational communication involves diverse sub-mechanisms<sup>6</sup>: lesson-drawing, transnational problem-solving, policy emulation, and the promotion of policy models by international organizations. Although they share the same modus of operation which relies completely on communication across countries, they differ from each other according to their implications (Holzinger and Knill 2008: 43).

Convergence may originate when national governments rationally use experience of other countries or international organizations in order to solve domestic problems in terms of "lesson-drawing" (Rose 1991; Meseguer Yebra 2003). International agents may act as promoters of lesson-drawing by providing a platform for communicative interaction in transnational professional networks (Parreira Do Amaral 2006: 86). This does

Other kinds of convergence include policy assimilation between states (sigma-convergence), changes of country rankings regarding a certain policy (gamma-convergence), and the extent to which laggard states catch up with leader states over time (beta-convergence) (Heichel et al. 2008: 81-83).

<sup>&</sup>lt;sup>4</sup> I do not assess outcomes as they are not directly connected to the mechanisms leading to convergence and are often influenced by intervening factors operating independently of convergence mechanisms that are of primary interest in this study (Holzinger and Knill 2008: 31).

<sup>&</sup>lt;sup>5</sup> The convergence mechanisms of legal harmonization, imposition and independent problem-solving are not included in the model.

These sub-mechanisms have to be regarded as ideal types and will appear in hybrid forms in reality.

not automatically lead to policy convergence as a program that may not be transferable, judged as inefficient or received negatively in a country. "Transnational problemsolving" is another type of policy learning (Haas 1992; Knill and Tosun 2008: 515), in which political and economic elites as well as transnational epistemic communities develop shared perceptions of and solutions to similar domestic problems, and thus guarantee transferability of policy models (Börzel and Risse 2002). "Policy emulation", or symbolic imitation, originates from the wish for conformity with other countries. It may lead to convergence of policy practices when policy makers faced with a high degree of uncertainty<sup>7</sup> try to gain legitimacy by their policy environment and thus copy best practices in the field (Héritier and Knill 2001: 5; Walgenbach 2001: 334-335; Tews, Busch, and Jörgens 2003: 594). These practices may stem from other states or international organizations that may act as supporters of policy emulation if they exhibit a positive reputation in this policy field (Barnett and Finnemore 2004; Martens and Balzer 2007: 89). In contrast, international organizations play a more active role when engaging in the "international policy promotion" of their specific models (Keck and Sikkink 1998). As norm entrepreneurs, they spread best practices and enable benchmarking processes of countries, which puts domestic policy makers under legitimization pressure to adapt to the policy models, which may enhance the cross-country homogenization of policies (Knill and Tosun 2008: 515).

In addition, international initiatives may further the domestic adoption of their policy aims by stimulating regulatory competition of the states involved. Regulatory competition exists in case of high economic interdependence of national economies, often operationalized by trade figures (Holzinger, Knill, and Arts 2008: 167). It refers to a country's intention to enhance the relative functional effectiveness of its institutional settings, and entails related mutual adaptive reactions of the other countries (Knill and Lenschow 2005: 585). The resulting reforms are intended to shape regulatory exigencies in order to maintain competitiveness of the national industry and to hinder emigration of capital and labor abroad (Coleman 2001; Holzinger and Knill 2005).

Usually, the conceptualization of international regulatory competition is associated with a race to the bottom, which is the case concerning price competition. Although education institutions, particularly in HE, have always been confronted with competitive pressure, education is increasingly regarded as human capital and the wealth of nations, which is why present developments in many states increasingly exhibit competitive features (Gürüz 2003: 21-24; Leuze et al. 2008: 15). Countries are likely to compete

Uncertainty is produced by situations of unstable resource availability, by pronounced competition or by contradictory aims and heterogeneous expectations of various environmental areas, insecure aims and unclear meansends relations regarding the technologies in use (Hasse and Krücken 2005; Parreira Do Amaral 2006: 27-28).

for the best education system and thus to try and improve their education system's performance by meeting the recommendations of the international initiatives (Dobbins 2008: 63-64). Thus, a race to the top, which refers to the upward driving effects of policies in order to improve performance (Knill and Tosun 2008: 514-15), is in this case more likely than a race to the bottom. This mechanism is evaluated by a country's dependence on intensive implementation of international policy models in education for its economy.

Table 1: Mechanisms of Voluntary Policy Convergence

Mechanism	Incentive	Response
Transnational communication		_
- Lesson-drawing	Problem pressure	Governments rationally use foreign experience or own historic experience to solve domestic problems
<ul> <li>Transnational problem-solving</li> </ul>	Parallel problem pressure	Transnational elite networks develop common problem perceptions and solutions for similar national problems
<ul> <li>Policy emulation</li> </ul>	Desire for conformity	Governments copy policies that are regarded as legitimate
<ul> <li>International policy promotion</li> </ul>	Pressure for legitimacy	International organizations actively promote distinct policy models
Regulatory competition	Competitive pressure	Countries facing competitive pressure mutually adjust their policies

Source: own account, based on Holzinger & Knill (2005: 780)

However, international initiatives do not directly exert influence on the degree, direction and pace of national policy change. Rather, their impact is expected to be filtered by intervening domestic factors of political institutional settings such as direct democracy or federalism. These involve institutional veto points and veto player constellations that determine capacities for reformability and are ascribed a high impact for explaining the specific paths of reform processes (Schmidt 1993). While veto points "refer to all stages in the decision-making process on which agreement is legally required for a policy change" (Haverland 2000), veto players are actors whose agreement is necessary to change the status quo (Tsebelis 2000). Influencing the degree of leeway for state activity, a high density of veto points and players, and a high distance between veto players' positions are assumed to impede far-reaching reforms, leading to inertia or only enabling marginal change.

# 3 SWISS SECONDARY EDUCATION – DRAWING CONCLUSIONS FROM PISA'S REVELATIONS

The OECD is an intergovernmental organization of industrial countries aimed at enabling its members to develop and share best practices. This is also the case in the policy field of education where the OECD program PISA is one of the most advanced programs regarding performance measures of students; and received high attention and appreciation from many countries. As a study measuring the performance of students that finished obligatory schooling, it uncovered striking deficits even in industrial nations. From the PISA results, the OECD drew diverse recommendations that are presented in this chapter. On this basis I assess which aspects of the "PISA model" have been implemented by Switzerland in terms of delta-convergence, and elaborate on the causal processes that led to the adoption of the international aims at the domestic level.

# 3.1 OECD Recommendations and Swiss Convergence

In a series of international thematic reports, the OECD makes recommendations for SE policy making, ranging from rather implicit to very explicit statements. These concentrate on a set of factors that turned out to be positively correlated with student performance, though without claiming a causal relationship.

#### The OECD Recommendations

The OECD furthers reforms of national *school structures* (1) that include early child-hood education (OECD 2009: 14) and turn selective models into integrated ones (OECD 2004b: 65), because selection and tracking constitute institutional barriers that reinforce socio-economic disparities. In addition, the OECD recommends specifying consistent and compulsory curricular *educational standards* (2) of quality such as standards-based examinations<sup>8</sup> and general guidelines to further a balanced quality (OECD 2009: 14). *Teacher training* (3) attains special attention from the OECD, particularly because the aim of an integrated school structure requires teachers to individually promote students from different backgrounds. The focus is on both professional development of teachers and the procedures of selection. Monitoring of student and system performance standards is regarded by the OECD as a key factor for the success of education systems (OECD 2004a: 19). Internal and external *quality assurance*<sup>9</sup> (4) or assessment systems of student performance are recommended for identifying common difficulties and best practices to instruct improvement. Particularly, professional national

<sup>8</sup> http://www.oecd.org/findDocument/0,3354,en\_2649\_35845621\_1\_119835\_1\_1\_1,00.html [29.01.2011]

<sup>9</sup> http://www.oecd.org/document/35/0,3343,en\_2649\_35845621\_39722787\_1\_1\_1\_1\_00.html [29.01.2011]

evaluation agencies are considered necessary (OECD 2004b: 67). School autonomy (5) must be enhanced in order to improve school systems by delegating responsibilities for budgets, course contents, etc. to schools and local authorities (OECD 2004a: 19; 2004b: 67, 71). The growing demand for educational evidence on which to base political and practical decisions requires an evidence-informed practice and policy, requiring the improvement of educational research and statistics (6) (OECD 2009: 87). In order to integrate migrants and minorities within mainstream education, diversity management is a core recommendation (OECD 2009: 83). It includes the individualization of learning and teaching processes (OECD 2004b: 43) as well as special programs for underprivileged students (OECD 2005: 95). Educational reforms should focus on cultural and social differences, e.g. by expanding all-day schooling and supporting individual students' performance (OECD 2004b: 65).

### Swiss Reforms

One of the core reforms in Swiss SE is the revision of the educational Constitution in 2006. While responsibilities in the system did not change, and for elementary school still lie with the cantons, the cantons themselves were obliged to coordinate in order to regulate structural indicators uniformly. The Federation got the means to generate pressure for domestic harmonization as it can declare an intercantonal agreement, a *concordat*, as nationally binding if cantons do not reach an intercantonal solution. By harmonizing cantonal education systems, the Constitution is intended to enhance international competitiveness of Switzerland, intra-Swiss mobility and effectiveness of obligatory schooling.

Both to implement the constitutional article and as an indirect reaction to PISA, the most outstanding reform project of the last decades was introduced in August 2009: the intercantonal agreement on the harmonization of obligatory schooling "HarmoS". Since 2001, harmonization has been a strategic focus of the twenty-six cantonal education directors that jointly developed HarmoS (Maradan and Mangold 2005; EDK 2007). Even though the intention to harmonize was not new, the attempt to enhance intra-Swiss mobility, quality and permeability in the system by harmonization was successful for the first time. HarmoS goes beyond the school concordat of 1970 (EDK 1970: 91-94) that did not suffice to further harmonization and even hindered reforms. After coordination had failed in the 1990s, the Swiss Conference of Cantonal Ministers of Education (EDK) created the basis for far-reaching harmonization of core indicators, such as school entry age, compulsory education, and duration, as well as aims and transitions of educational steps. To this end, the EDK provided a number of instruments that address diverse OECD recommendations (Table 2).

Table 2: Reforms in Swiss Secondary Education

Instruments of the Reform Project HarmoS		
1. Subordinate aims of obligator	Basic education aims	
schooling	Language teaching	
2. Structural benchmark figures	School enrolment	
	Duration of educational levels	
3. Instruments of system develop	ment Educational standards	
and quality assurance	Curricula, teaching aids and evaluation instruments	
	Portfolios	
	Educational Monitoring	
4. Organization of the school day	Core times and day structures	

Source: own account, based on the Intercantonal Agreement on the Harmonization of Obligatory Schooling (EDK 2007)

First, HarmoS introduced superordinate basic education aims of obligatory schooling for five educational domains: languages, mathematics and natural sciences, social sciences and humanities, music and art, as well as sports and health. In order to develop competence levels for these domains, Switzerland draws on international activities produced in the context of PISA (EDK 2004). For obligatory schooling, HarmoS postulates a local standard language and competences in a second Swiss language and another foreign language. Second, structural benchmark figures determined the length of school phases and extended the period of obligatory schooling from nine to eleven, starting enrolment at age four in order to enhance early learning. Primary school comprises eight years, including two years of basic level or kindergarten depending on the canton. The transition to upper SE is planned for vocational education after school year 11, for Matura at Gymnasium after school year 10. Three years are spent in upper SE, which starts after obligatory schooling and is split into general and vocational education. This harmonization of school structures can be regarded as an implementation of the OECD recommendation of a cooperative school structure, prolonging the time of students from different socio-economic backgrounds spent together at school, and furthering integration at an earlier age. Third, the introduction of the instrument of national educational standards was intended to reduce diversity, assure quality and harmonize the aims of the single education phases (Zahner Rossier et al. 2004). These minimal standards have been introduced in particular due to PISA 2000 results (EDK 2004). Instead of the cantonal level, curricula and teaching material will be henceforth developed at a languageregional level. HarmoS also involved education statistics and monitoring as an instrument for planning and politics: as a pilot scheme, the educational report of 2006 provides data on all educational levels of Switzerland. The first regular report of 2010 assesses the performance of the education system in terms of the criteria of effectiveness, efficiency and equity (SKBF 2006). This component shows a convergence of Swiss

policy making towards the OECD recommendations of setting educational standards and introducing education statistics. Fourth, the organization of instruction during schooldays was organized by blocks and there is an offer of optional daycare tailored to market needs, which equates to the OECD recommendation of actively managing diversity and individually supporting children with different socio-economic backgrounds.

This section set out to provide a picture of contemporary political changes in Swiss SE and brought certain evidence that, with the school concordat HarmoS, comprehensive reforms were introduced. It highly corresponds with diverse OECD recommendations (Table 3). Social equity and integration was strongly promoted via structural reforms of increasing the schooling time spent together by all pupils. Educational standards and unitary curricula for the linguistic regions were established and structural benchmarks harmonized, which fits the OECD recommendations of establishing standards for education. Switzerland undertook large efforts to introduce educational statistical monitoring for informing education politics and practice, thus conforming to the OECD orientation of education statistics. By furthering optional day care and core times, the recommendation of diversity management was addressed. Reforms concerning the promotion of teaching quality and establishment of quality assurance systems did not occur, due to the fact that these recommendations were already quite well implemented in Switzerland. In contrast, the OECD recommendation of school autonomy was not addressed.

Table 3: Swiss Delta-Convergence towards OECD Recommendations

	OECD Recommendations	Swiss Convergence
1.	Cooperative school structure	X
2.	Educational standards	X
3.	Teaching quality	p
4.	Quality assurance	p
5.	School autonomy	0
6.	Educational research and statistics	X
7.	Diversity management	X

Source: own account, based on OECD (2004a; 2004b; 2009; 2010)

*Notes*: X = reforms; p = previous conformity with PISA; <math>0 = no reforms

# 3.2 Convergence Mechanisms of the PISA Study

Short of legal authority in education, the OECD cannot enforce any recommendations on the PISA countries, consisting of both OECD members and partner countries. In contrast to the European Commission in the case of Bologna, it does not possess any financial means to influence domestic policy making but has various soft governance instruments at hand. As an economically oriented organization, it has not originally been working in the field of education policy. In the last two decades, it gained elevated

competences on education policy and is today globally recognized for its expertise (Osterwalder and Weber 2004: 24). Since its large-scale PISA assessment starting in 2000, it even has been regarded as an international authority in education (Balzer and Rusconi 2007). PISA became highly acknowledged as the most important comprehensive international study comparing the performance of students across national education systems. As part of an indicators program and known for using highly sophisticated procedures, PISA results provided scientific advice on best practices and demonstrated the significance of education to the participating countries. By furthering transnational communication and enabling competition of education systems, PISA played a vital role for the introduction of latest Swiss SE reforms and partly produced delta-convergence towards its model.

In Switzerland, there are two core reasons for the intercantonal school concordat HarmoS coming into being. The first reason is a national one. Already in the pre-PISA phase, a high pressure has existed since the 1970s to harmonize the Swiss cantonal school systems due to problems of mobility, incompatibility and incomparability of cantonal school structures (Maradan and Mangold 2005). However, reform efforts to harmonize SE had been hindered by single cantons and the Swiss people's party (Interview CH06). The fear of federal intervention into the cantonal sphere of education, referred to as the "Sword of Damocles" (Interview CH15), was important for the introduction of HarmoS as it made cantons willing to accept the solution of an intercantonal concordat for harmonizing their educational systems.

The second reason for the development of HarmoS is international. By publishing regular reports on diverse factors that were found to be relevant to educational performance in the PISA studies and by holding international expert conferences, the OECD creates a platform for regular international discussion and dissemination of knowledge, ideas and best practices among countries. This promoted the development of shared norms and ideals, created a common cognitive basis of domestic education policy makers, and enabled lesson-drawing. The concept of PISA is based on the assumption that international comparative studies enable the identification of the characteristics of successful school systems and thus trigger collective learning processes, which may contribute to improving political steering of national education policies and allocation processes (Osterwalder and Weber 2004: 13).

As PISA helped to diffuse international best practice models by assessing which factors enhanced school performance, the importance of measuring performance for assessing quality was recognized in Switzerland (Interview CH05). In its declaration of 2002 on Swiss PISA results, the EDK acknowledged the findings as incontestable facts (EDK 2002). This high acceptance of the OECD's judgment on the Swiss education system must seem even more important if PISA's pretension is considered to provide an inter-

national quality measure on which education politics is supposed to orient (Osterwalder and Weber 2004: 12, 14).

Although the aims of the intercantonal treaty HarmoS were not new in Switzerland, only PISA was able to further the reform process. Due to its role as an international authority in education, the OECD's policy ideal provided a source of scientific legitimization for the contested HarmoS reform in a situation of high problem pressure and uncertainty, and acted as an important international reference point for Swiss policy makers. Consequently, the policy makers concerned were able to justify HarmoS by referring to international requirements for reform as shown by PISA (Buschor, Gilomen, and McCluskey 2003) in order to enhance equity and performance in schools. In Switzerland, political actors adopted policy examples to acquire legitimization (Interview CH08). Moreover, the promotion of learning processes of stakeholders in conferences, seminars and regular meetings on HarmoS and PISA of the OECD's Centre for Educational Research and Innovation was regarded as the most influential convergence mechanism of PISA for Swiss reforms to take place (Interview CH08). For example, the PISA result of high social discrimination in Switzerland heavily inspired the reform project HarmoS (Interview CH07, Maradan and Mangold 2005).

In addition, the PISA study periodically provided the participating countries with comparative data on student performance in the disciplines of literacy, mathematics and natural sciences, as well as on specific indicators such as school autonomy or teacher education. The triennial repetition of the study provides a tool for measuring a country's progress in education and thus enables benchmarking which refers to a continuing process of comparison. On this basis, PISA created ranking lists of participating countries (Interview CH05), which contributed to transparency in educational indicators. For the first time, this enabled countries mutual examinations and cross-country comparisons of their education systems' conditions and performances (Parreira Do Amaral 2006: 84). In doing so, PISA disseminated a performance culture and an economic rationale and enhanced competition. However, particularly those countries which either scored worse than the OECD average or worse than previously thought are expected to be put under political pressure for justification and for corresponding reforms. On the basis of PISA data, the OECD published recommendations on those practices that highly correlate with excellent school performance in order to assist countries in surmounting national shortcomings (OECD 2004a; 2004b; 2009). In this way, it provided international best practices on which countries can orient in their competition in terms of a "race to the top" and thus helped to further convergence.

For Switzerland, which did not participate in the Progress in International Reading Literacy Study (PIRLS), PISA provides the only source for reliable and comparative data on student performance (SKBF 2010). While in mathematics and natural sciences

PISA certified Switzerland relatively good results, it also disclosed unexpected short-comings of the education system in literacy, where a high percentage of 15-year-old students only reached the lowest competence level at the end of obligatory schooling. The problem pressure created by these results was particularly strong as Swiss education expenses were comparatively high, which was regarded as an indication for the inefficient use of resources. Although having often been significantly above OECD average, the Swiss PISA results did not meet the expectations of policy makers of having one of the best education systems worldwide (Interview CH06, CH07), which increased the country's uncertainty and the political pressure for reform. Issues concerned particularly the high impact of the students' socio-economic background on their educational performances that was much bigger than previously anticipated (Interview CH06, CH07).

This revelation put education up on the Swiss political agenda. It underlined the need for reform activities and enhanced existing pressure on the government and the bodies responsible for education to adopt the recommendations of the OECD to "survive" in the contest for the best results (Interview CH01, CH06). As a result, Swiss policy makers started to orient on the OECD's recommendations as a solution to counteract these deficiencies. In this way, the PISA ranking was able to provoke higher academic competition in the Swiss education scene due to subjacent economic interests (Interview CH05).

# 4 SWISS HIGHER EDUCATION – INTEGRATION INTO BOLOGNA'S NETWORK

The Bologna process is originally not an EU process but an intergovernmental process that started in 1999 by 29 European countries to create a European Higher Education Area. The European Commission<sup>10</sup> has taken a central role as a full Bologna member since 2001. While reforms failed from the 1980s until the mid-1990s, Switzerland's participation in the Bologna process changed the Swiss HE landscape in the last decade (Interview CH07, Criblez 2008). As Bologna was intended to be completed by 2010, it is important to assess the existence of convergence towards its model. Thus, this chapter presents the aims, or "action lines", of Bologna, and assesses in which dimensions delta-convergence of Swiss policy output to these aims has occurred. In a second step, I evaluate the convergence mechanisms released by the international initiative on Swiss policies.

When talking about the European Commission I refer to the Directorate-General for Education and Culture, if not stated otherwise.

# 4.1 Bologna Aims and Swiss Convergence

With Bologna, European HE ministers intended to promote the overarching goals of mobility, employability and competitiveness in a Europe with freedom of movement. Thus, in Bologna and its biennial follow-up conferences, they agreed on diverse aims (Rauhvargers, Deane, and Pauwels 2009: 6-11).

## The Bologna Aims

In order to make obtained qualifications transparent to other countries' employers and universities and to enable qualification recognition, a national qualifications framework (1) is being developed as a core goal (Bergen Communiqué 2005). Similarly, diploma supplements (2) that describe degree qualifications and the European Credit Transfer and Accumulation System (3) based on learning outcomes are crucial for improving degree recognition (European Council 1997). The abolishment of obstacles to regional mobility and mobility (4) between HE institutions and degree programs for students and scientific staff is to be furthered. European dimensions (5) in HE must be established, referring to mobility programs, curricular developments and cooperation of HE institutions. For competitiveness, it is highly relevant to assure quality (6) on a high level in European HE institutions. The European Standards and Guidelines for Quality Assurance define rules for internal and external QA systems such as student and international participation. At Bologna's core is the introduction of a three-tiered study structure (7) including Bachelor, Master and doctoral levels, which requires the participating countries to introduce legal foundations prescribing how to introduce and manage these new structures. The aim of *life-long learning* (8) furthers social cohesion in an aging society and international competitiveness of knowledge-based economies, involving recognition of prior learning and widened access to HE.

### Swiss Reforms

The multitude of federal and cantonal Swiss HE actors recognized Bologna's significance early and established project organizations to initiate corresponding legislative reforms. National coordination guaranteed a unitary reform implementation in HE institutions - universities and universities of applied sciences so that Bologna goals were comparatively quickly and comprehensively implemented in Switzerland (SBF and BBT 2007; Universität Zürich 2009).

Prior to the Bologna process, the Law on University Promotion (UFG) of 1999<sup>11</sup> renewed political steering, thereby allowing universities and political committees to en-

<sup>11</sup> This law, passed in the same year as the Bologna process was kicked off, is a consequence of the forerunners of

gage in Bologna (Bundesversammlung 1999). Accordingly, the Federation furthers quality of teaching and research particularly through accreditation and QA. With HE institutions' increased autonomy, the responsibility for QA and accreditation shifted from the Federation to the independent agency-like "Center of Accreditation and Quality Assurance of the Swiss Universities" (OAQ), which sets QA requirements, prepares accreditation decisions and regularly checks compliance. This reform enabled the Bologna aim of QA to be implemented.

As a structural reform, the Law on University Promotion established the Swiss University Conference (SUK) as a joint organ of the Federation and "university cantons" (Bundesrat and Regierungen der Universitätskantone 2000), which furthered their cooperation in terms of cooperative federalism (Interview CH14). The SUK practically has veto power even if legislation did not intend this (Interview CH07). It was given the single responsibility for the implementation of reforms which guaranteed Bologna's binding character and thus allowed its reliable implementation. For example, the SUK furthers projects accompanying Bologna and finances its implementation in universities (Interview CH02). Moreover, guidelines that are valid for all universities can be developed, which was impossible before. Responsible for cantonal universities and Swiss Federal Institutes of Technology, the SUK passed binding "Bologna Directives" in 2003. They fix a uniform framework with leeway for cantonal diversity to introduce new study structures by the end of 2010. The framework addresses the European Credit Transfer and Accumulation System, the diploma supplement, admission to Master studies, and title awards (SBF and BBT 2007). The three Rectors' Conferences - consisting of the Rectors' Conference of the Swiss Universities, the Rectors' Conference of the Swiss Universities of Applied Sciences and the Swiss Conference of Rectors of Universities of Teacher Education - implemented Bologna's aim of inter-institutional mobility by agreeing on permeability between different types of HE institutions in 2008 under the condition of supplementary performance records. As a decisive step, coordination of Bologna was given to the Rectors' Conferences in 2000, while the Federation was not allowed to intervene in the domain of the cantons before (Interview CH02).

Legislative reforms for universities of applied sciences differ from those for universities. Since 2005, the partially revised Federal Act on Universities of Applied Sciences<sup>12</sup> (FHSG) prescribed compulsory Bachelor and voluntary Master study programs for uni-

the 1999 Bologna process: The Magna Charta Universitatum unto Bologna of 1988 already aimed at furthering exchange of students and academic personnel as well as the international alignment of titles and examinations. In 1997, the UNESCO and the Council of Europe decided the recognition of HE qualifications in the Lisbon Convention. Finally, the visionary Sorbonne Declaration of 1998 marked the beginning of the Bologna Process.

<sup>12</sup> http://www.admin.ch/ch/d/sr/c414\_71.html [29.01.2011]

versities of applied sciences under federal jurisdiction and established QA as well as accreditation systems. For universities of applied sciences under cantonal jurisdiction and universities of teacher education, the Council of the universities of applied sciences of the EDK decreed Directives for the Implementation of the Bologna Declaration in the year 2002 (Fachhochschulrat der EDK 2002). Regulating the introduction of new degree programs, they are mostly congruent with the SUK's Bologna directives.

Besides the Law on University Promotion and the Federal Act on Universities of Applied Sciences, the Bologna aims of QA and accreditation were furthered by two directives. First, the SUK decreed Quality Assurance Directives in 2006 including principles based on minimum standards for QA systems in universities (SUK 2007b). Second, Accreditation Directives were issued in 2007 by the SUK for universities and by the Federal Department of Economic Affairs for universities of applied sciences. They formulate the principles of accreditation and fix the procedure, conditions and quality standards for monitoring (EVD 2007; SUK 2007a). While the SUK directives refer to the Bologna reform as a frame of reference, the directives of the Federal Department of Economic Affairs are consistent with the standards and guidelines for quality assurance of the European Association for Quality Assurance in Higher Education (ENQA 2005).

Due to rising cross-cantonal and international coordination needs for harmonizing cantonal systems, the Swiss Constitution was revised in 2006. The new constitutional Article 63a improves cooperation between the Federation and cantons by committing them to a joint steering of HE institutions, while responsibilities in the system did not change, and for elementary school still lie with the cantons. Moreover, they should guarantee HE quality via contracts and competence transfer to common organs without fundamentally changing the existing division of competences (Interview CH13). It created the basis for an all-Swiss simplified steering of HE, transparent performance-oriented financing, strategic planning and better task sharing among HE institutions. <sup>14</sup> For Switzerland, the constitutional revision is "an important mission for the future of our country: to guarantee qualitative Swiss education and to make a name for ourselves at the European and international level" (Bundesrat 2001).

In order to fulfill this constitutional duty, the Federal Law on Promotion and Coordination of HE Institutions (HFKG) draft of 2009 created a unitary Swiss higher education area (Bundesrat 2009). In order to guarantee quality, competitiveness and effi-

This implies self-evaluation of the institution, external evaluation by independent experts as well as accreditation decisions of the SUK and the Federal Department of Economic Affairs, respectively.

http://www.sbf.admin.ch/htm/themen/uni/hls\_de.html and http://www.sbf.admin.ch/htm/dokumentation/publikationen/grundlagen/factsheets/FS01\_Hochschulsystem\_e\_2008.pdf [25.01.2011]

ciency of the system<sup>15</sup>, it replaced the Law on University Promotion and the Federal Act on Universities of Applied Sciences and thus became the only federal legal basis for financial promotion of cantonal universities and universities of applied sciences, and for political steering of Swiss HE with the cantons.<sup>16</sup>

Table 4: Reforms in Swiss Higher Education

Date	Law
2003	Bologna Guidelines of SUK
2005	Federal Act on Universities of Applied Sciences (FHSG)
2006	Revision of the Constitution (art. 61a on the Educational Area of Switzerland; art. 63a on HE)
2006	Quality Assurance Directives of SUK
2007	Accreditation Directives of SUK and EVD
2009	Federal Law on Promotion and Coordination of Higher Education Institutions (HFKG)
2009	NQF draft of Rectors' Conferences

Source: own account

The draft on the Swiss qualifications framework is based on European guidelines of the European Qualifications Framework<sup>17</sup> for the European Higher Education Area and the European Qualifications Framework for Lifelong Learning, comprising all types of HE institutions, namely universities, universities of applied sciences, and universities of teacher education. Rectors' Conferences passed the draft in the year 2009 for the attention of the State Secretariat for Education and Research (CRUS 2008: 110). The SUK and the Council of universities of applied sciences of the EDK checked if the national qualifications framework could be integrated into the Bologna directives as a document of reference and thus could be state-legitimized. This implements the Bologna aim of introducing a national qualifications framework.

In sum, Swiss HE reforms exhibit convergence towards the majority of Bologna aims by adopting new study structures, the European Credit Transfer and Accumulation System, the national qualifications framework, diploma supplements as well as QA and accreditation (Table 4). However, there are still some challenges, namely in modernizing doctoral education by increasing the number of structured programs, and in

http://www.sbf.admin.ch/htm/themen/uni en.html [25.01.2011]

Based on the Federal Law on the Promotion and Coordination of Higher Education Institutions, a new intercantonal concordat on HE prepared by the EDK was given in consultation in 2009. It will include intercantonal financing that was regulated before in two agreements for universities and universities of applied sciences.

The European Qualifications Framework provides a common reference for countries in order to facilitate recognition and transferability of qualifications at the European level, covering both vocational education and training, and general education.

strengthening European dimensions in HE. In life-long learning, policies had already existed.

Table 5: Swiss Delta-Convergence towards Bologna Aims

	Bologna Aims	<b>Swiss Convergence</b>
1.	National qualifications framework	X
2.	Diploma supplements	X
3.	European Credit Transfer and Accumulation System	X
4.	Mobility promotion of students, researchers and administrative staff	X
5.	European dimensions in higher education	0
6.	Quality assurance and accreditation	X
7.	Three cycle system	X
8.	Life-long learning	p

*Source*: own account, based on the Bologna declaration (1999) and its follow-up communiqués (2001 Prague, 2003 Berlin, 2005 Bergen, 2007 London, 2009 Leuven/Louvain-la-Neuve, 2010 Budapest-Vienna)

Notes: X = reforms; p = previous conformity with Bologna; 0 = no reforms

# 4.2 Convergence Mechanisms of the Bologna Process

Integrating European HE, the Bologna process is singular regarding the scope of participating countries and collaborating HE actors. It consists of a series of multilateral conferences of both EU and non-EU members (Reinalda 2008), and intertwined international political arenas in HE that were formerly unconnected to one single thematic expert network. Thus, Bologna networks provide unique transnational platforms for communicating on HE topics, which enables policy learning of stakeholders (Interview EU02). In Bologna conferences and Bologna Follow-Up Group (BFUG) seminars (Interview CH08), signatory states developed shared norms, guidelines and informal standards that established definite HE aims. These norms, in turn, enabled HE actors to orient on the same international strategy of Bologna (Osterwalder and Weber 2004: 26), influenced national policies and pushed convergence towards Bologna (Bieber 2010a).

Switzerland shared a set of common challenges in HE with other European countries: the length of study was regarded as too long, and employability of graduates as too low (Interview CH01, CH14). Moreover, new competitors from the U.S. and the U.K. enhanced the pressure on European knowledge-based societies that lacked attractiveness and internationality of study programs for foreign students. Thus, the transparency of the national study system and degree recognition had to be furthered, the international mobility and the transition between university and universities of applied sciences facilitated, and study programs shortened (Interview CH05). In order to create common problem perceptions and solutions at a transnational level, states engaged in Bologna. "Via harmonizing the rules, Bologna led to higher competition, but at the same time, it opened possibilities of cooperation that were inexistent in this way." (Interview CH18).

By introducing reforms in various areas of the HE system, Switzerland turned out to be a poster child regarding the implementation of the Bologna aims.

The Swiss government regarded high adaptation to Bologna as necessary to make its education system compatible with those of other European countries (Interview CH06, CH14). Thus, Swiss delegates communicate in diverse transnational Bologna networks and are represented in six of eight BFUG consultative member organizations.<sup>18</sup> Via these institutional memberships of Swiss organizations in Bologna-relevant networks (Arts et al. 2008: 212), the country contributes to transnational problem-solving. For example, in the field of QA, the European Association for Quality Assurance in Higher Education holds regular international workshops, in which diverse national QA agencies such as the Center of Accreditation and Quality Assurance of the Swiss Universities "compare and discuss their audit programs" (OAQ 2003: 20). Moreover, cooperation with epistemic communities of international and German-speaking scientific societies plays a big role for Swiss QA (Interview CH08), which spreads good practices, experiences and information to Swiss QA agencies, public authorities and HE institutions. According to an interview partner, only the comparison of foreign perspectives and own perspectives led to a revision of opinions, and Bologna's core influence was assigned to learning processes of stakeholders in conferences and workshops (Interview CH08). The common use of the Bologna ideal is likely to have pushed Swiss convergence towards Bologna aims.

In addition, at the end of the 1990s, Swiss problem pressure consisted in a strong need for HE reforms, particularly for harmonization. However, harmonization requires a special legitimization in Switzerland, while diversity has always been considered as necessary (Osterwalder and Weber 2004: 16). In this situation, the overseas as a reference gained importance in education at the expense of cantonal and Swiss references so that political action could now draw on a broader international legitimization basis (Osterwalder and Weber 2004: 26-27). The Bologna process provided Swiss policy makers with the first opportunity for reform in years, as it functioned as an international policy example that includes commonly agreed objectives and thus provided a source of legitimacy. "That was helpful: one could claim that the international level does so as well. This created a ground of acceptance that we did not just think over something at home, but that this is actually broadly agreed" (Interview CH10). A decisive reason for

Switzerland participates in UNESCO-European Centre for Higher Education (CEPES), the European University Association (EUA), Education International Pan-European Structure, the European Students' Union (ESU), Businesseurope and the European Association for Quality Assurance in Higher Education (ENQA). It is not member of the European Association of Institutions in Higher Education (EURASHE), the Commission and the Council of Europe.

the country to join Bologna was that a high number of "surrounding countries would participate in this process" (Interview CH14). The Swiss government copied aims of the promising model in order to strategically use the "international argument" (Gonon 1998: 23) of Bologna as a "vehicle to legitimize controversial or overdue reforms" (Interview CH07), such as the modernization of teaching (Interview CH14). In the context of Bologna, policy emulation was regarded as a core mechanism influencing Swiss reforms (Interview CH08).

Via the BFUG, the European Commission as its full member tried to internationally promote the Bologna model and influence domestic HE policies by making policy recommendations, providing information and investing financial resources. However, Switzerland is rather skeptical about EU influence: "If a [Swiss] politician justifies his action with the EU, then the measure is dead" (Interview CH18). In contrast, consultative BFUG members are more acknowledged by Swiss policy actors. For example, the European Association for Quality Assurance in Higher Education furthered the dissemination of information on certain quality standards, ideas and expertise of international best practice, enabled benchmarking and thus inspired the Swiss directives on QA and accreditation (ENQA 2005).

As another mechanism of convergence, regulatory competition refers to a high economic linkage of national economies. Global developments towards knowledge societies increased the importance of HE for the economy, resulting in a common reform process. Responding to the growing economic competition of information societies, the Bologna process promotes attractiveness and competitiveness of the European Higher Education Area as a location of education vis-à-vis the U.S. and Asia (Interview CH02, Dobbins 2008: 187). By harmonizing European HE and enhancing comparability, it furthers international competition of national HE systems in terms of a race to the top, i.e. high adaptation to the Bologna aims (Interview CH18). For example, biennial Bologna Stocktaking Reports measure progress of signatory states towards Bologna aims, by using "Bologna scorecards", for benchmarking. Thus, Bologna is clearly a case of governance by competition (Osterwalder and Weber 2004: 23).

The European Commission does not have any competencies in the HE domain in which binding transnational regulations do not apply (Dobbins 2008). However, it can impact national policies by boosting competition via its membership in BFUG. Through this backdoor of Bologna, European integration has spilled over from economic to education policy and entailed an increase of competition. Osterwalder and Weber (2004: 25) argue similarly: "The other actors [the EU] intervene stronger in the structure of the education system: by systematic application of comparative, scientifically based standards or by producing real competition, particularly in HE."

Switzerland is highly export-oriented and economically interconnected with its main trade partners of EU countries: around 60% of Swiss exports go to, and 80% of its imports come from EU countries. 19 Due to this strong economic impact of the EU on Switzerland, the need for internationality and Euro-compatibility is often taken as means of pressure for reform (Interview CH19). Switzerland depends on high-quality HE in order to provide its economy with high-skilled labor and thus enhance its international economic competitiveness. Thus, the country considers the process of adaptation to the Bologna aims as an international competition for producing high-quality education, and thus high skilled human capital for a powerful economy (Interview CH12, Lisbon European Council 2000; Parreira Do Amaral 2006: 90). This wish for higher economic competitiveness was a driving factor for Swiss HE reforms towards Bologna (Interview CH08). For Switzerland, legislative adaptation to the Bologna model that is shared by all EU countries is an economic issue. Bologna conformity is highly relevant to the Swiss labor market and yields economic advantages for the small open economy surrounded by the EU market (Riklin 1995; Katzenstein 2003; Armingeon 2007). For example, degree recognition provides the Swiss students and researchers access to the EU (Interview CH24). Switzerland is convinced that different national education systems hindered competition and mobility hitherto (Interview CH17).

In the light of reform backlog, the Swiss government feared that its HE system was left behind by innovations in other countries and would lose connection to the international community when its HE system was incompatible with European study systems (Knill and Lenschow 2005: 598; Dobbins 2008: 73). Thus, the country oriented on the Bologna aims and best practices and standards of the European Association for Quality Assurance in Higher Education, finally promoting delta-convergence of Swiss HE policy towards Bologna aims.

#### 5 COMPARATIVE CONCLUSION OF POLICY SECTORS

In Swiss education policy, the period from the 1980s well into the 1990s had been characterized by a reform backlog. With the kickoff of the PISA study and the Bologna process at the turn of the century, the amount and intensity of Swiss education reforms increased considerably. This was astonishing as the policy field of education is, in general, skeptically defended against exogenous interference and as Switzerland, in particular, exhibits reform-hindering political institutions and a high sense of political autonomy. The present comparative case study demonstrates that Swiss education reforms are indeed – at least partially - directed towards the two international models of PISA and

http://www.osec.ch/internet/osec/de/home/export/countries/eu/export.html [25.01.2011]

Bologna, and that soft mechanisms based on communication and competition can act as influential tools in international education governance.

Both the PISA study and the Bologna process were able to trigger delta-convergence of Swiss SE and HE policies towards their models, although to different degrees and by different means. One can speak of a high degree of convergence towards the PISA model, and also Bologna aims were fast and comprehensively adopted. In SE, the adaptation of Swiss legislation is only elevated in the areas of a cooperative school structure, educational standards, educational research and statistics, and diversity management. A previous fit exists concerning teaching quality and quality assurance, while there was non-convergence towards PISA regarding school autonomy. In HE, delta-convergence exists in the areas of the new study structures, the European Credit Transfer and Accumulation System, the national qualifications framework, diploma supplements as well as quality assurance and accreditation. While there was a previous conformity with the goal of life-long learning, Switzerland still has to take adaptive measures regarding doctoral education and the European dimension in HE.

Delta-convergence in the two education sectors was furthered by transnational communication and regulatory competition, however with different focuses. Via transnational communicative processes, the international organizations of the OECD and the EU successfully promoted Swiss convergence towards their policy models. In Swiss SE, where a high pressure for reform existed, the OECD provided a model for orienting domestic policy making in terms of international policy promotion. This occurred by publishing diverse recommendations based on the PISA results and by providing participating countries with a platform for exchanging ideas, knowledge and best practices in PISA seminars and expert conferences. In this context, Switzerland was able to draw lessons for necessary reforms. Transnational problem-solving and policy emulation, however, were not at the center of activities in Switzerland that regards its education system as highly idiosyncratic. In Swiss HE, international policy promotion by consultative members of the BFUG, less by the European Commission, had an impact on Swiss policy making. The Bologna process enabled countries to exchange best practice examples and solutions for shared political problems by way of transnational problemsolving in expert conferences, in which Switzerland was strongly engaged. Simultaneously, Bologna offered Swiss actors a point of reference for legitimizing domestic reforms in the light of reform backlog.

In addition, regulatory competition furthered convergence in Switzerland, particularly as the country's economy highly depends on high-skilled labor and the importance of education for the economy is increasing. Via PISA, the OECD enabled Switzerland a means to compare its students' performances for the first time and thus released competitive pressure on its education system, which enforced the wish for reforms and fur-

thered convergence towards some of its recommendations. By enhancing transparency and comparability of European HE systems and biennially benchmarking progress of signatory states in its Stocktaking Reports, the Bologna process put pressure on the Swiss government for good scoring at implementing the Bologna aims. In sum, Switzerland put high emphasis on converging towards international models in order to stay competitive in the context of economic globalization.

In sum, a combination of domestic and international factors explains the reforms in Swiss education. Some contents of the reforms had already been discussed in Switzerland before the start of the international initiatives so that they were rather given an impulse than "invented" by the initiatives, which points to the convergence mechanism of independent problem-solving that was not included in the theoretical model. However, the significant congruence of the content of international models and Swiss reforms, and the temporal occurrence of a high amount of Swiss reforms soon after the launch of the international initiatives, following a long period of reform backlog, support the assumption that the initiatives provide the main causal explanation.

Further research may address this issue and also consider alternative explanations for convergence - such as other macro-social processes of continuing educational expansion, commodification of education and new technical achievements - and non-convergence of domestic policies to particular policy items of the international models. For example, why were the international initiatives not able to further reforms enhancing school autonomy or European dimensions in higher education in Switzerland? Future studies also might include other countries in order to evaluate whether several countries' education policies approximate in terms of a sigma-convergence, which would be a strong sign of globalization in the field of education.

## REFERENCES

- Armingeon, Klaus. 1999. "Die Stabilität der eidgenössischen Regierungskoalition in vergleichender Perspektive." Österreichische Zeitschrift für Politikwissenschaft 28 (4): 463-73.
- Armingeon, Klaus. 2007. "Kleinstaaten in Weltmärkten: Drei Ergänzungen der Katzenstein-These." Zeitschrift für Sozialreform 53 (3): 297-320.
- Arts, Bas, Duncan Liefferink, Jelmer Kamstra, and Jeroen Ooijevaar. 2008. "The Gap Approach: What Affects the Direction of Environmental Policy Convergence?" In *Environmental Policy Convergence in Europe. The Impact of International Institutions and Trade*, ed. Katharina Holzinger, Christoph Knill and Bas Arts. New York: Cambridge University Press, 196-226.
- Balzer, Carolin, and Alessandra Rusconi. 2007. "From the European Commission to the Member States and Back A Comparison of the Bologna and Copenhagen Process." In *New Arenas of Education Governance. The Impact of International Organizations and Markets on Educational Policy Making*, ed. Kerstin Martens, Alessandra Rusconi and Kathrin Leuze. New York: Palgrave, 57-75.
- Barnett, Michael, and Martha Finnemore. 2004. *Rules for the World: International Organizations in Global Politics*. Ithaca, N.Y.: Cornell University Press.
- Bennett, Colin. 1991. "What Is Policy Convergence and What Causes It?" *British Journal of Political Science* 21 (2): 215-33.
- Bergen Communiqué. 2005. *The European Higher Education Area Achieving the Goals*. Communiqué of the Conference of European Ministers Responsible for Higher Education in Bergen, 19-20 May 2005.
- Bieber, Tonia. 2010a. "Europe à la Carte? Swiss Convergence Towards European Policy Models in Higher Education and Vocational Education and Training." *Swiss Political Science Review* 16 (4): 773-800.
- Bieber, Tonia. 2010b. "Playing the Multilevel Game in Education The PISA Study and the Bologna Process Triggering Swiss Harmonization." In *Transformation of Education Policy*, ed. Kerstin Martens, Alexander-Kenneth Nagel, Michael Windzio and Ansgar Weymann. Basingstoke: Palgrave, 105-131.
- Bologna Declaration. 1999. *The European Higher Education Area*. Joint Declaration of the European Ministers of Education in Bologna, 19 June 1999.
- Bonoli, Giuliano. 1999. "Pension Policy in Switzerland. Institutions and the Politics of Expansion and Retrenchment." In *Institutional Change and Public Policy in Japan and Switzerland*, ed. Ulrich Kloeti and Katsumi Yorimoto. Zürich: Universität Zürich, 165-178.
- Bonoli, Giuliano, and André Mach. 2000. "Switzerland: Adjustment Politics within Institutional Constraints." In *Welfare and Work in the Open Economy. Diverse Responses to Common Challenges*, ed. Fritz W. Scharpf and Vivien Schmidt. Oxford: Oxford University Press, 131-174.
- Börzel, Tanja, and Thomas Risse. 2002. "Die Wirkung internationaler Institutionen. Von der Normanerkennung zur Normeinhaltung." In *Regieren in internationalen Institutionen. Festschrift für Beate Kohler-Koch*, ed. Markus Jachtenfuchs and Michèle Knodt. Opladen: Leske & Budrich, 141-181.

- Bundesrat. 2001. Parlamentarische Initiative Zbinden Hans. Bildungsrahmenartikel in der Bundesverfassung. Bern: Der Schweizerische Bundesrat.
- Bundesrat. 2009. Botschaft zum Bundesgesetz über die Förderung der Hochschulen und die Koordination im schweizerischen Hochschulbereich (HFKG). Bern: Der Schweizerische Bundesrat.
- Bundesversammlung. 1999. Bundesgesetz über die Förderung der Universitäten und über die Zusammenarbeit im Hochschulbereich (Universitätsförderungsgesetz, UFG). Die Bundesversammlung der Schweizerischen Eidgenossenschaft. http://www.cepes.ro/services/pdf\_laws/Switzerland2.pdf.
- Buschor, Ernst, Heinz Gilomen, and Hugette McCluskey. 2003. *PISA 2000: Synthese und Empfehlungen*. Neuchâtel: Bundesamt für Statistik.
- Cibulka, James G. 1994. "Policy Analysis and the Study of the Politics of Education." *Journal of Education Policy* 9 (5): 105-25.
- Coleman, William D. 2001. "Agricultural Policy Reform and Policy Convergence. An Actor-Centered Institutionalist Approach." *Journal of Comparative Policy Analysis: Research and Practice* 3 (2): 219-41.
- Corbett, Anne. 2006. "Higher Education as a Form of European Integration: How Novel is the Bologna Process?" *ARENA Working Paper No.15*.
- Criblez, Lucien, and Fritz Osterwalder. 2004. "Editorial." *Schweizerische Zeitschrift für Bildungswissenschaften* 26 (1): 5-9.
- CRUS. 2008. *The Curricula Reform at Swiss Institutes of Higher Education*. Bern: Rektorenkonferenz der Schweizer Universitäten.
- Dobbins, Michael. 2008. Comparing Higher Education Policies in Central and Eastern Europe. Dissertation. Doktor der Politikwissenschaft ed. Konstanz: Universität Konstanz. kops.ub.uni-konstanz.de/volltexte/2009/7453/pdf/DISS fuer KOPS.pdf.
- EDA, and EVD. 1999. *Bilaterale I.* Bern: Eidgenössisches Departement für auswärtige Angelegenheiten, Eidgenössisches Volkswirtschaftsdepartement.
- EDA, and EVD. 2004. *Bilaterale II*. Bern: Eidgenössisches Department für auswärtige Angelegenheiten; Eidgenössisches Volkswirtschaftsdepartement.
- EDK. 1970. Konkordat über die Schulkoordination vom 29. Oktober 1970. Bern: EDK.
- EDK. 2002. Erklärung der EDK zu den Ergebnissen von "PISA 2000". Bern: Schweizerische Konferenz der kantonalen Erziehungsdirektoren.
- EDK. 2004. *HarmoS. Zielsetzungen und Konzeption*. Bern: Schweizerische Konferenz der kantonalen Erziehungsdirektoren.
- EDK. 2007. Interkantonale Vereinbarung über die Harmonisierung der obligatorischen Schule [HarmoS-Konkordat], 14 June 2007.
- Enders, Jürgen. 2004. "Higher Education, Internationalization, and the Nation-State: Recent Developments and Challenges to Governance Theory." *Higher Education* 47 (4): 361-82.
- ENQA. 2005. Standards and Guidelines for Quality Assurance in the European Higher Education Area. Helsinki: European Association for Quality Assurance.

- European Council. 1997. Convention on the Recognition of Qualifications Concerning Higher Education in the European Region. Lisbon: European Treaty Series No.165.
- EVD. 2007. FH-Akkreditierungsrichtlinie. Bern: EVD.
- Fachhochschulrat der EDK. 2002. Richtlinien für die Umsetzung der Erklärung von Bologna an den Fachhochschulen und den Pädagogischen Hochschulen. Bern: EDK.
- Froschauer, Ulrike, and Manfred Lueger. 2003. Das qualitative Interview zur Praxis interpretativer Analyse sozialer Systeme. Wien: WUV.
- Fthenakis, Wassilios E. 2003. Elementarpädagogik nach PISA. Wie aus Kindertagesstätten Bildungseinrichtungen werden können. Freiburg: Herder.
- Fuchs, Hans-Werner, Andrea Linde, and Lutz R. Reuter. 2003. "Zur Transformation der nationalen Hochschulsysteme durch die Europäische Union: Der "Bologna-Prozess" Ziele, Entwicklungen, Kritik."

  Hamburger Beiträge zur Erziehungs- und Sozialwissenschaft 6.
- Furlong, Paul. 2005. "British Higher Education and the Bologna Process: An Interim Assessment." *Politics* 25 (1): 53-61.
- Goldthorpe, John. 1997. "Current Issues in Comparative Macrosociology: A Debate on Methodological Issues." *Comparative Social Research* 16: 1-26.
- Gonon, Philipp. 1998. Das internationale Argument in der Bildungsreform. Die Rolle internationaler Bezüge in den bildungspolitischen Debatten zur schweizerischen Berufsbildung und zur englischen Reform der Sekundarstufe II. Bern / Berlin: Peter Lang.
- Gürüz, Kemal. 2003. Higher Education in the Global Knowledge Economy. Paper Prepared for Presentation at the Convocation, 08 October, Binghamton, New York.
- Haas, Peter M. 1992. "Introduction: Epistemic Communities and International Policy Coordination." International Organization 46 (1): 1-35.
- Hasse, Raimund, and Georg Krücken. 2005. Neo-Institutionalismus. Bielefeld: Transcript-Verlag.
- Haverland, Markus. 2000. "National Adaptation to European Integration: The Importance of Institutional Veto Points." *Journal of Public Policy* 20 (1): 83-103.
- Heichel, Stephan, Katharina Holzinger, Thomas Sommerer, Duncan Liefferink, Jessica Pape, and Sietske Veenman. 2008. "Research Design, Variables and Data." In *Environmental Policy Convergence in Europe: The Impact of International Institutions and Trade*, ed. Katharina Holzinger, Christoph Knill and Bas Arts. Cambridge: Cambridge University Press, 64-97.
- Héritier, Adrienne, and Christoph Knill. 2001. "Differential Responses to European Policies: A Comparison." In *Differential Europe. The European Union Impact on National Policy-Making*, ed. Adrienne Héritier, Dieter Kerwer, Christoph Knill, Dirk Lehmkuhl and Michael Teutsch. Lanham: Rowman & Littlefield, 257-294.
- Holzinger, Katharina, and Christoph Knill. 2008. "Theoretical Framework: Causal Factors and Convergence Expectations." In *Environmental Policy Convergence in Europe: The Impact of International Institutions and Trade*, ed. Katharina Holzinger, Christoph Knill and Bas Arts. Cambridge: Cambridge University Press, 30-63.

- Holzinger, Katharina, and Christoph Knill. 2005. "Causes and Conditions of Cross-National Policy Convergence." *Journal of European Public Policy* 12 (5): 775-96.
- Holzinger, Katharina, Christoph Knill, and Bas Arts. 2008. Environmental Policy Convergence in Europe: The Impact of International Institutions and Trade. Cambridge: Cambridge University Press.
- Holzinger, Katharina, Christoph Knill, and Thomas Sommerer. 2008. "Environmental Policy Convergence: The Impact of International Harmonization, Transnational Communication and Regulatory Competition." *International Organization* 62 (4): 553-88.
- Jakobi, Anja P., Kerstin Martens, and Klaus Dieter Wolf. 2009. *Education in Political Science Discovering a Neglected Field*. London / New York: Routledge.
- Katzenstein, Peter J. 2003. "Small States and Small States Revisited." New Political Economy 8 (1): 9-30.
- Keck, Margaret, and Kathryn Sikkink. 1998. Activist Beyond Borders. Advocacy Networks in International Politics. Ithaca: Cornell University Press.
- Knill, Christoph. 2005. "Introduction: Cross-National Policy Convergence." *Journal of European Public Policy* 12 (5): 764–774.
- Knill, Christoph, and Andrea Lenschow. 2005. "Coercion, Competition and Communication. Different Approaches of European Governance and their Impact on National Institutions." *Journal of Common Market Studies* 43 (3): 581-604.
- Knill, Christoph, and Jale Tosun. 2008. "Policy Making." In *Comparative Politics*, ed. Daniele Caramani. Oxford: Oxford University Press, 495-519.
- Kriesi, Hanspeter, and Alexander H. Trechsel. 2008. *The Politics of Switzerland. Continuity and Change in a Consensus Democracy*. Cambridge: Cambridge University Press.
- Lavenex, Sandra. 2006. "Switzerland: Between Intergovernmental Co-Operation and Schengen Association." In *Borders and Security Governance. Managing Borders in a Globalised World*, ed. Marina Caparini and Otwin Marenin. Münster: LIT Verlag, 233-251.
- Leuze, Kathrin, Tilman Brand, Anja P. Jakobi, Kerstin Martens, Alexander-Kenneth Nagel, Alessandra Rusconi, and Ansgar Weymann. 2008. "Analysing the Two-Level-Game. International and National Determinants of Change in Education Policy Making." *TranState Working Papers des Sonderforschungsbereich 597 Staatlichkeit im Wandel, Transformations of the State, Nr. 72* Bremen.
- Lisbon European Council. 2000. Presidency Conclusion, Lisbon, 23-24 March 2000.
- Maradan, Olivier, and Max Mangold. 2005. "Bildungsstandards in der Schweiz. Das Projekt HarmoS." PH Akzente 2: 3-7.
- Martens, Kerstin, Alexander-Kenneth Nagel, Michael Windzio, and Ansgar Weymann, eds. 2010. *Transformation of Education Policy*. Basingstoke: Palgrave.
- Martens, Kerstin, and Carolin Balzer. 2007. "All Bark and No Bite? The Implementation Styles of the European Union and the Organization for Economic Cooperation and Development in Education Policy." In *International Organizations and Implementation: Enforcers, Managers, Authorities?*, ed. Jutta Joachim, Bob Reinald and Bertjan Verbeek. London: Routledge, 88-102.

- Martens, Kerstin, and Klaus Dieter Wolf. 2006. "Paradoxien der neuen Staatsräson: die Internationalisierung der Bildungspolitik in der EU und der OECD." *Zeitschrift für internationale Beziehungen* 13 (2): 145-76.
- Mayer, Horst. 2004. *Interview und schriftliche Befragung Entwicklung, Durchführung und Auswertung.*München: Oldenbourg.
- Meseguer Yebra, Covadonga. 2003. *Learning and Economic Policy Choices: A Bayesian Approach*. Florence, Italy, European Forum Working Paper Series European University Institute, no 5. ed. European Forum Working Paper Series European University Institute No 5. Florence.
- Meyer, John W. 2005. Weltkultur. Wie die westlichen Prinzipien die Welt durchdringen. Frankfurt am Main: Suhrkamp Verlag.
- OAQ. 2003. *Jahresbericht* 2003. Bern: Organ für Akkreditierung und Qualitätssicherung. http://www.oaq.ch/pub/downloads/OAQ Jahresbericht 2003 D.pdf.
- Obinger, Herbert. 1998. Politische Institutionen und Sozialpolitik in der Schweiz. Der Einfluss von Nebenregierungen auf Struktur und Entwicklungsdynamik des schweizerischen Sozialstaates. Frankfurt a. M: Peter Lang.
- OECD. 2004a. Messages from PISA 2000. The Final Summary Report from the PISA 2000 Survey. Paris: OECD.
- OECD. 2004b. What Makes School Systems Perform. Seeing School Systems through the Prism of PISA. Paris: OECD.
- OECD. 2005. School Factors Related to Quality and Equity. Results from PISA 2000. Paris: OECD.
- OECD. 2009. Education Today 2009: The OECD Perspective. Paris: OECD.
- OECD. 2010. Education Today 2010: The OECD Perspective. Paris: OECD.
- Osterwalder, Fritz, and Karl Weber. 2004. "Die Internationalisierung der föderalistischen Bildungspolitik." Schweizerische Zeitschrift für Bildungswissenschaften 26 (1): 11-32.
- Parreira Do Amaral, Marcelo. 2006. *The Influence of Transnational Organizations on National Education Systems*. Frankfurt am Main: Peter Lang.
- Rauhvargers, Andrejs, Cynthia Deane, and Wilfried Pauwels. 2009. Bologna Process Stocktaking Report 2009. Report from Working Groups Appointed by the Bologna Follow-Up Group to the Ministerial Conference in Leuven/Louvain-La-Neuve, 28-29 April 2009.
- Reinalda, Bob. 2008. "The Bologna Process and Its Achievements in Europe 1999-2007." *Journal of Political Science Education* 4 (4): 463-76.
- Riklin, Alois. 1995. "Isolierte Schweiz. Eine europa- und innenpolitische Lagebeurteilung." Swiss Political Science Review 1 (2-3): 1-26.
- Rose, Richard. 1991. "What Is Lesson-Drawing?" Journal of Public Policy 11 (1): 3-30.
- SBF, and BBT. 2007. *Bologna Process. National Report: 2005-2007. Switzerland.* Bern: Staatssekretariat für Bildung und Forschung; Bundesamt für Berufsbildung und Technologie.

- Schimmelfennig, Frank. 2006. "Prozessanalyse." In *Methoden der Politikwissenschaft. Neue qualitative und quantitative Analyseverfahren*, ed. Joachim Behnke, Thomas Gschwend, Delia Schindler and Kai-Uwe Schnapp. Baden-Baden: Nomos, 263-271.
- Schmidt, Manfred G. 1993. "Theorien in der international vergleichenden Staatstätigkeitsforschung." In *Policy-Analyse. Kritik und Neuorientierung (PVS-Sonderheft 24)*, ed. Adrienne Héritier. Opladen: Westdeutscher Verlag, 371-393.
- SKBF. 2006. Bildungsbericht Schweiz 2006. Aarau: SKBF.
- SKBF. 2010. Bildungsbericht Schweiz 2010. Aarau: SKBF.
- Sommerer, Thomas, Katharina Holzinger, and Christoph Knill. 2008. "The Pair Approach: What Causes Convergence of Environmental Policies?" In *Environmental Policy Convergence in Europe: The Impact of International Institutions and Trade*, ed. Katharina Holzinger, Christoph Knill and Bas Arts. Cambridge: Cambridge University Press, 144-195.
- SUK. 2007a. Kommentar zur Teilrevision der Richtlinien für die Akkreditierung im universitären Hochschulbereich in der Schweiz (Akkreditierungsrichtlinien) vom 28. Juni 2007. Bern: Schweizerische Universitätskonferenz.
- SUK. 2007b. Qualitätssicherungsrichtlinie. Bern: Schweizerische Universitätskonferenz.
- Tews, Kerstin, Per-Olof Busch, and Helge Jörgens. 2003. "The Diffusion of New Environmental Policy Instruments." *European Journal of Political Research* 42 (4): 569-600.
- Trompenaars, Fons. 2006. Riding the waves of culture. London: Brealey.
- Tsebelis, George. 2000. "Veto Players and Institutional Analysis." *Governance: An International Journal of Policy and Administration* 13 (4): 441-74.
- Universität Zürich. 2009. Bericht über die 6. nationale Bologna-Tagung der CRUS. Studienbedingungen an den universitären Hochschulen im Bologna-Syste, Bericht vom 4. September 2008, 01.10.2008 KaB.
- Walgenbach, Peter. 2001. "Institutionalistische Ansätze in der Organisationstheorie." In *Organisationstheorien*, ed. Alfred Kieser. Stuttgart, Berlin, Köln: Verlag W. Kohlhammer, 353-402.
- Witte, Johanna. 2006. Change of Degrees and Degrees of Change. Comparing Adaptations of European Higher Education Systems in the Context of the Bologna Process. Enschede: CHEPS.
- Witte, Johanna. 2004. "The Introduction of Two-Tiered Study Structures in the Context of the Bologna Process: A Theoretical Framework for an International Comparative Study of Change in Higher Education Systems." *Higher Education Policy* 17 (4): 405-25.
- Wolter, Stefan C., and Maja Coradi Vellacott. 2002. Sibling Rivalry: A Look at Switzerland with PISA Data. Discussion Paper no. 594. Bonn: Forschungsinstitut zur Zukunft der Arbeit.
- Zahner Rossier, Claudia, Simone Berweger, Christian Brühwiler, Thomas Holzer, Myrta Mariotta, Urs Moser, and Manuela Nicoli. 2004. PISA 2003: Kompetenzen für die Zukunft. Erster nationaler Bericht. Neuchâtel/Bern: Bundesamt für Statistik; Eidgenössische Konferenz der schweizerischen Erziehungsdirektoren.

#### LIST OF ABBREVIATIONS

BBT Federal Office for Professional Education and Technology

BFUG Bologna Follow-up Group

CRUS Rectors' Conference of the Swiss Universities

EDK Swiss Conference of Cantonal Ministers of Education

EFTA European Free Trade Association

EU European Union

EVD Federal Department of Economic Affairs

FHSG Federal Act on Universities of Applied Sciences

HarmoS Swiss Reform Project for the Harmonization of Obligatory School

HE Higher Education

HFKG Federal Law on Promotion and Coordination of HE Institutions (HFKG)

NQF National Qualifications Framework

OAQ Center of Accreditation and Quality Assurance of the Swiss Universities

OECD Organization for Economic Co-operation and Development

PIRLS Progress in International Reading Literacy Study
PISA Programme for International Student Assessment

QA Quality Assurance

SBF State Secretariat for Education and Research

SE Secondary Education

SUK Swiss University Conference
UFG Law on University Promotion
WTO World Trade Organization

# **BIOGRAPHICAL NOTE**

**Tonia Bieber** is research fellow in the project C4 'International Education Politics' at the TranState Research Center 'Transformations of the State', University of Bremen.

*Telephone:* +49 421 218 8707 *Fax:* +49 421 218-8721

*E-Mail:* tonia.bieber@sfb597.uni-bremen.de

Address: University of Bremen, Collaborative Research Center

"Transformations of the State", Linzer Strasse 9a,

D 28359 Bremen