Current PISA top performers already undertook comprehensive changes to their school governance systems some time ago. Several eastern European countries have also begun to implement similar reform efforts since the collapse of the real-socialistic systems. Within the context of the current debate over the Austrian education system, the question arises as to which types of reforms are actually being implemented in these countries. Furthermore, is there empirical evidence for any difference between the school governance systems with regard to efficiency? A recently published ibw study provides new findings on the subject.

**Typology of Governance Regimes – Types of Reform and Potential for Change**

In theory we can distinguish three ideal types of control regimes (see table 1):

- The Bureaucratic Type ("Quality Control Type")
- The Efficiency Type
- The Legitimacy Type

Most of the comparison countries analyzed in the ibw study (Australia, Germany, Finland, Latvia, New Zealand, Poland, The Czech Republic, Hungary, England) can be associated with the "classic" bureaucratic type prior to reform.

Interestingly, such bureaucratic control regimes, despite dedicated and serious reform efforts, often remain quality control governance types. This is for example the case in Austria and Germany. Thus, it can be ventured to say that bureaucratic types have a relatively limited degree of freedom when it comes to reform, unless it is decided to make extensive and comprehensive reforms to the way the school administration acts and functions. According to the literature on political sciences however, this would mean a massive change in the existing institutional structures and challenging the very foundations of the school governance systems. Experience has shown that this requires enormous effort and hard work to convince all the parties involved. Nevertheless, several countries (among others, most of the PISA top performers) chose to follow this path.

Table 1: Characteristic School Governance Regimes

<table>
<thead>
<tr>
<th>Control Type</th>
<th>The Bureaucratic / Quality Control Type</th>
<th>The Efficiency Type</th>
<th>The Legitimacy Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant Control Principle</td>
<td>Directive</td>
<td>Competition</td>
<td>Participation</td>
</tr>
<tr>
<td>Control Media</td>
<td>Rules, legislation, hierarchy</td>
<td>Competition, market, incentives, resources</td>
<td>Responsibility</td>
</tr>
<tr>
<td>Control Goal</td>
<td>Functionality</td>
<td>Efficiency</td>
<td>Cooperation</td>
</tr>
<tr>
<td>Organization Principle</td>
<td>Hierarchy, division of labour, horizontal activity areas – vertical responsibilities (i.e. responsibility increases as you move “upwards”)</td>
<td>Market between equivalent bidders (schools) with equivalent / standardized range of offers (“scholastic education”)</td>
<td>Coordination, regulation between various actors and institutions</td>
</tr>
<tr>
<td>Strengths</td>
<td>Resistance against short- and middle-term social, economical and political tendencies Under ideal circumstances: clear and predictable procedures and processes (legality principle)</td>
<td>Already short-term increase of efficiency in the use of resources “customer relationship” between students / parents and school</td>
<td>High integration potential of relevant stake holders, actors and institutions</td>
</tr>
<tr>
<td>Weakness / Problem Areas</td>
<td>Bureaucratic failure, X-inefficiency, limited flexibility, Baumol’s cost disease</td>
<td>Market failure</td>
<td>High coordination costs, not transparent</td>
</tr>
</tbody>
</table>
Table 2 clearly shows that virtually all the educational reform efforts in the countries analyzed in the ibw study, with the exception of Austria and Germany, aim for a shift of strategically important competencies (control over personnel and financial matters) on the level of local independent administration (municipalities, provinces, regions) or directly at the schools (in Australia and in England).

Table 2: Effects of the Educational Political Reforms on the National Governance Systems

<table>
<thead>
<tr>
<th>Country</th>
<th>Governance Type Before the Reforms</th>
<th>Governance Type After the Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia – Victoria</td>
<td>Quality control (bureaucratic type)</td>
<td>School empowerment with clear competitive market elements (efficiency type)</td>
</tr>
<tr>
<td>Germany</td>
<td>Quality control (bureaucratic type)</td>
<td>Quality control with attempts at school empowerment (bureaucratic type)</td>
</tr>
<tr>
<td>England</td>
<td>Local empowerment with distinct quality control elements (mix between bureaucratic and legitimacy type)</td>
<td>School empowerment with competitive market elements (efficiency type)</td>
</tr>
<tr>
<td>Finland</td>
<td>Quality control (bureaucratic type)</td>
<td>Local empowerment with elements of school empowerment (legitimacy type)</td>
</tr>
<tr>
<td>Latvia</td>
<td>Quality control (bureaucratic type)</td>
<td>Local empowerment with components of quality control (legitimacy type)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Quality control (bureaucratic type)</td>
<td>Competitive market (efficiency type)</td>
</tr>
<tr>
<td>Austria</td>
<td>Quality control (bureaucratic type)</td>
<td>Quality control with attempts at school empowerment (bureaucratic type)</td>
</tr>
<tr>
<td>Poland</td>
<td>Quality control (bureaucratic type)</td>
<td>Local empowerment (legitimacy type)</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Quality control (bureaucratic type)</td>
<td>Local empowerment (legitimacy type)</td>
</tr>
<tr>
<td>Hungary</td>
<td>Local empowerment with distinct quality control elements (mix between bureaucratic and legitimacy type)</td>
<td>Local empowerment with elements of school empowerment (efficiency type)</td>
</tr>
</tbody>
</table>

Source: Schmid/Hafner/Pirolt 2007

Accordingly, the central and respectively the federal authorities mainly assume a supervisory function, while the local administration and respectively the school carry out the substantial decisions (e.g. hiring of personnel). New Zealand provides an interesting exception: here a competitive situation has been explicitly created between the schools. All the countries thus went through a reform from a strongly bureaucratically administered school governance system to the direction of a legitimacy or an efficiency type.

In comparison, the educational political reforms carried out in Austria (as well as in Germany) did not lead to a clear shift in the direction of local empowerment or school empowerment, even though individual accents in the direction of school empowerment can certainly be seen. They are still characterized by strong bureaucratic administrative behaviour.

System Configurations & Efficiency

The efficiency of school governance systems is difficult to determine or measure empirically. This is due in part to the multidimensionality of the influencing factors as well as to a substantial lack of data regarding the input and output factors of the educational systems. Two studies were recently published however, that provide new insight into the question of system efficiency based on empirical analysis. These studies represent an essentially new methodological approach and as such shall be discussed in the following paragraphs.

Gonand et al. (2007) examined the expense and system efficiency in the compulsory school systems of 28 OECD countries. Based on a national experts questionnaire (they evaluated the system configuration of their school governance system), 21 efficiency indicators were created. The aggregation of these individual indicators into an overall index provides a summary overview of the international differences in efficiency performance (see illustration 1). According to this, Austria, along with most of the QC-bureaucratic types, ranks at the bottom of the efficiency scale. The authors conclude that “the institutional framework of the educational system in Austria is disadvantageous for every form of efficiency”. The illustration also makes it clear that (in part considerable) room for improvement with regard to efficiency may still exist in all the countries.

The efficiency scale was not determined based upon objective output criteria, but rather deducted according to various assumptions. Thus, for example, a clearly defined distribution of competencies between central and local authorities is considered as being very efficient. For several of the indicators however, the assumptions made by the authors, and respectively the aggregation of various system aspects in an indicator, must be scrutinized critically: for instance, the indicator “extent of freedom in making school decisions regarding budget allocation under consideration of the instructional methods implemented” measures two very different system components. It is possible in this case, that two individual indicators would have been more conclusive. Several of the country ratings also seem implausible.1

Source: Schmid/Hafner/Pirolt 2007

1 For a detailed discussion of the indicators used and their aggregation, see the original study by Gonand et al. (2007).
Aside from the necessary criticism of the details, the study does however provide an important theoretical and empirical approach for dealing with the topic. For further analysis, we compared the national efficiency ratings with the output based on international student performance evaluations.

As illustration 2 shows, there is virtually no clear correlation between the efficiency rating and the PISA test results. However, those countries considered PISA top performers do for the most part have a higher efficiency rating according to Gonand et al. (2007).

Furthermore, a rough characterization of the governance systems is also displayed in the illustration. An essential system element thereby is the extent of devolution locally either in the form of school empowerment or local empowerment. In both cases, this means a markedly higher degree of autonomy for the schools as compared to the “classic” bureaucratic models. Thus, all the PISA top performers show a markedly higher degree of autonomy locally as compared to the less successful PISA participants. The illustration also shows however, that autonomy per se is not a guarantee for good student performance (for example USA, Denmark, Slovak Republic etc.). For comparison, also see Schmid/Pirrolt 2005.

A comparison the three groups of countries (PISA top performers, countries whose PISA results lie within the OECD average, and PISA "sub" performers) with the 21 efficiency indicators based on a discriminant analysis shows that it is sufficient to use just five of the twenty one possible efficiency indicators to correctly assign 93% of the countries to the correct group of countries². As measured by student performance, the following specific designs may thus be of relevance: extent of local/school decision-making capacity; clarity of the division of competencies between the actors on a sub-national level; extent of the performance evaluation of the instructors and schools; freedom to select a school as well as the extent to which benchmarking is present on a school level.

A different methodological approach was chosen by Wößmann (2005) in order to analyze the influence of system elements of the school governance system on student performance. Based on pooled TIMSS-, IGLU- and PISA student performance results with country specific structure variables for each school governance system, multivariate regression analysis was conducted in 54 countries. The results can essentially be interpreted as an extension of the study by Gonand et al.

The first institutional factor to be examined was external evaluation by specified performance standards. It was revealed thereby that students in countries with external school leaving examinations did significantly better than the students in countries without external tests. The difference in performance is roughly equivalent to one school year!

Of particular interest is the effect of school autonomy on student performance. Wößmann shows that the effects of school autonomy differed greatly for various areas of decision-making. Thus, in most cases a positive correlation arises between student performance and school autonomy with respect to procedural and personnel decisions. In contrast, a negative correlation arises between student performance and school autonomy with respect to the determination of the school budget and deciding upon the scope of instruction. In summary, it can be concluded that performance is promoted when the schools are provided with a framework for the budget and instruction standards – but are allowed to make decisions independently within this framework.

In the context of school autonomy, it is necessary to implement external performance evaluations as a control element for the scope schools have to make decisions by themselves. Wößmann illustrates this for three domains: teacher wages, endowment with resources and instructional content. In those countries that do indeed have a high degree of organizational freedom in these three

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Diagram 1: Efficiency Rating of National School Systems

![Diagram 1: Efficiency Rating of National School Systems](Image)

Source: Gonand et al. (2007); illustration by ibw

Diagram 2: Efficiency versus Student Performance

![Diagram 2: Efficiency versus Student Performance](Image)

Source: Gonand et al. (2007); OECD PISA 2003; illustration by ibw

Note: QC…Quality Control (Bureaucratic type); LE…Local Empowerment; SE…School Empowerment
areas, and yet do not accompany this freedom with external examinations, there is a recognizably negative effect on student performance. Where school autonomy is coupled with an external output evaluation however, there is a positive effect on student performance. In this sense, external output evaluations represent an integral system element in the overall setting of a school governance system that has a high degree of school autonomy. They apparently hinder opportunistic attitudes in the sense that pursuing the self-interest of the school has no consequences for the school. External evaluations thus create information about the efficiency of the schools. School behaviour that leads to a decrease in efficiency is thus made visible and can be met by consequences from the supervisory authorities and/or the parents. This creates an incentive for the decision-makers at the schools to use their autonomy effectively to promote student performance.

Unfortunately, the study from Wößmann does not differentiate in any more detail according to the diverse forms of devolution of decision-making competencies (i.e. local empowerment versus school empowerment) and respectively according to the different forms of output supervision (external examinations, external inspectorates, school/local self-evaluation etc.). Further research is certainly still needed in this area.

As both studies show, the school governance systems of the various countries differ from each other not only in terms of the extent of freedom in decision-making for local and/or school authorities, but also in terms of the manner in which school efficiency and student performance is structurally embedded in assessment procedures and respectively linked with other system elements in general. Through the comparison of diverse school governance “types” with the results from international student performance tests, it is possible to illustrate that a governance style that moves towards school or local empowerment can have a thoroughly positive influence on the system efficiency (e.g. in the sense of student performance). At the same time, school governance represents “only” one, albeit one that should not be underestimated, influential factor for the latter. **An efficient governance system can thus be seen as a necessary, but not sufficient precondition for good student performance.**

What conclusions can be drawn based on these studies with regards to the Austrian school governance system is touched upon in this study. Furthermore, the work includes among other things a detailed description of the school governance reforms in the comparison countries and a detailed theoretical analysis framework for the identification of school governance system types.

Further Literature:


1 Thus, Germany received a very high rating with regard to the extent of the local decision-making capacity. This is most likely a case of “mis”interpretation: due to the federal structure of the German educational system, the provinces have control over education. This is however, by no means equivalent to forms of local or school empowerment (to be similarly questioned are the evaluations for Spain and Switzerland). Conversely, the indicators for the local decision-making capacity of Great Britain, the Czech Republic, Hungary, New Zealand, the Netherlands as well as the Slovak Republic according to Gonand et al. may be set too low.

2 For the following countries we altered the data for the efficiency indicator “extent of local decision-making capacity” given in Gonand et al. (2007) according to our estimates: for Germany, Switzerland and Spain the efficiency rating was lowered (since in our opinion the extent of local/school decision-making capacity is lower). For Great Britain, the Czech Republic, Hungary, the Netherlands, New Zealand as well as the Slovak Republic according to Gonand et al. may be set too low.

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