## Infant Education and Circumstances of Upbringing in Switzerland<sup>1</sup>

My lecture will focuse on experiences of school reform in Switzerland, more exactly: in the Canton of Zurich. That is, I will not simply discuss conditions for growing up but restrict myself to concrete attempts which are supposed to improve these conditions. In this context I will neither talk about media influence nor about changed diets, also I will not discuss the effects of low birth rate, and finally I will also not deal with the question of in how far education towards patriotism might be the answer to today's problems of growing up. I will refer the "circumstances of upbringing" mostly to the question of in how far *state schools* may contribute to reacting to changed social conditions for today's children.

I will start with some introductory general remarks on education policy and on special aspects of Switzerland (1). In a second part I will introduce some of the already mentioned attempts, most of all discussing the development of school management and experiences with external evaluation (2). As a conclusion I will introduce new tools of school development, some of them in the context of tests and some of them in the context of experiments(3). When discussing the topic, the latter level is in most cases overlooked, but there is a variety of activities by local actors, which are not called "school development" but are exactly this. What is needed for this is not always a state programme but a problem which must be solved.

## 1. Swiss Education Policy and Its Basic Conditions

The decisive point of reference of school development are the single teacher, his/her students, and the classroom. Everything else are basic conditions which may be more or less favourable for development projects. One basic condition of future times will be international educational competition, about which many teachers do not want to know anything but which nevertheless not only exists but whose intensity is increasing. The extended international comparative studies were nothing else than the start of a new competition situation. At least at the level of systems we can definitely differentiate between "better" and "worse", and the ranking of the PISA-studies alone put single countries under pressure towards reform. *Bad* educational systems must improve, *good ones* must maintain their quality or must again improve it.

For the time being, however, competition concerns only those systems as in the end living on what happens in the classroom. The statistic machinery of PISA abstracts from this primary experience which is called the "front" even by completely non-military teachers. This front of daily teaching is a local one. Globalization in the classroom can only be felt as far as meanwhile the entirety of students at almost every place in Switzerland is multiculturally composed, something which is not at all true for teachers. Training for an increasingly heterogeneous school recruits staff still being monocultural in most cases. Swiss teachers teach students from many countries, and at some places Swiss students are a minority.

Since the development of state schools in the 19<sup>th</sup> century we have understood "education" to be a *national* entity, that is it is protected by borders and organized by a state monopoly. For this way of understanding, education has got nothing to do with

<sup>&</sup>lt;sup>1</sup> Lecture given at the Jissen Women University June 21st, 2006

competition and also nothing with opening up borders. In the end, school is about distributing facets of general education and privileges which are strongly connected to social background and less to equality of chances. One finds it difficult to internationalize privileges, for the time being there are standards only for a few fields, futhermore systems react much more to local problems than to national standards. Federal systems like Germany or Switzerland are differentiated to such a degree that every attempt towards globalization is supposed to fail due to countless special solutions.

School reform and quality development in Switzerland are based on 26 cantons having much more educational authority than the German federal states and probably also Japanese prefectures. Swiss cantons are single states, acting on their own without any need of agreeing with others. Reform in Germany, and maybe also in Japan, is dominated by centralist activities of administrations which look very strange to Swiss schools. Administration is *service publique* (public service) not the power of disposition of an authoritarian state which wants every detail to be organized by a central authority. Also educational administration is a public service which must be careful to keep itself able to learn. E. g. it must be able to put unnecessary decrees to the shredder at regular intervals instead of insisting on enforcing them.

Or it must know that lavishly constructed curricula have only one *real* function, they protect from criticism by parents. Already the perdominance of curricula is suspicious to such a degree that curriculum commitees should rather work under a dictate of slimness. When ten years ago in Zurich a new curriculum for basic primary and secondary schools came into effect, an evaluation produced the result that also this – strictly speaking, rather slim – curriculum is not used at schools (LANDERT/STAMM/TRACHSLER 1998). This experience is worth mentioning as it produced results. That is, administration has learned how to place different orders from then on, which looked for alternatives to the classical ways of organizing curricula instead of having ever new commissions try out ever new approaches with ineffective tools.

But my subject is not curriculum but school development. Educational federalism has a different meaning in Switzerland than in Germany. The political system is based on coordination and requires autonomy. In the field of obligatory school, i. e. from the first to the nineth year, there are only a few binding regulations, like e. g. a concordate on three PE lessons a week, originating from the year 1874. In principle, in the field of basic primary and secondary schools every canton is allowed to do what it likes. How does such a system work? And is it able to work at all?

If we compare the Swiss educational system to others, at first it comes to our attention how weak, or rather slim, the educational bureaucracy is. The real bearers of the system are not the cantons and not at all the Confederation but local municipalities, which fund schools, employ teachers, and are responsible for quality assurance in the context of canton regulations. Thus, power is not with the country as a whole but with municipalities and communities which have considerable taxation revenues at hand and in their great majority show balanced budgets. High debts for a long time would be unthinkable.

School supervision is done by a democratically legitimated militia commitee. Each community has an elected school committee, where citizens supervise the political business of school development. In other European countries there is nothing which could be compared to this, and I think that such commitees are also unknown in Japan. Already the expression "militia system" may lead to misunderstandings. It means taking over tasks

in the interest of the community without fixed employment for a certain period. There is the assumption that citizens are interested in public matters and that after having been introduced to the office – thus the expression "militia" – will be able to cope with tasks and to solve problems.

This system is based on local networking and does not need any developed bureaucracy. If there is speaking of "superior authorities", this is meant in the sense of regulating and in case of conflicts balancing authorities which supervise the frame but which are not active in an operational sense, and if, they interfere only subsidiarily. For a German or Japanese observer this is fascinating already due to reasons of history. There are no Prussian solutions, and also the *Code Napoléon* (French Napoleonic legislation) was not taken over. After the liberal development of basic primary and secondary schools and thus of public education after 1830, reforms have never been organized in a "top-down" way because it was not possible to simply give orders from top to down. On the other hand, every reform must be accepted by the basis, more exactly: nothing happens without vote and finally referendum. This explains two, carefulness of politics and consideration for the tried and tested.

How could this widely branched educational system be reformed, which is highly complex in the most confined of spaces and characterized by stubborness? Development after the mid-90s must be seen against the background of very different school and educational cultures, reforms are regionally different and do not show a common emphasis, even if there has been providing exchange and co-ordination among cantons and particularly regions. Thus, there is not newly inventing the educational wheel twentysix times, much more it is a system very capable of learning, which knows how to adjust general maximes of reform to local and regional situations, without ever having built up a strong administrative power. Only locally this system is really dense and beyond this it consists of a kind of communicative co-ordination which leaves extended room for specialities.

By this, I say at the same time that due to local networking an overall description is rather impossible and in any case would be too much for one lecture. I will thus not give an answer to the question about the general state of school reform in Switzerland but will take into consideration only the development in *one* canton, also as due to personal experience I known best about the development there. In the focuse of my lecture there will be reforms of school and general organisation between 1995 and 2005, that is during the past ten years. The Canton of Zurich has always had a certain kind of leading position with education, at least in the sense of developmental work being done here from which also other cantons gain profit. Reform in Zurich reaches from teacher's training to primary level<sup>2</sup>, many projects were lavishly evaluated, and most of the projects were also legitimated by referenda. In so far, the project is backed up by political consensus, even if much was and stll is debated.

The different projects in Zurich have general premises and aim at change being considered fundamental for the development of quality in the educational system. A complex system can only be changed by the interaction of single projects, never in toto, and always it is only possible to change one's own existing system and not to copy a foreign one. In so far, the Finnish comprehensive school rather plays a minor role for Switzerland. If there is

<sup>&</sup>lt;sup>2</sup> This means integrating kindergarden (two years) into the first year of basic primary and secondary school. Other cantons there is talking about a "basic level", while there are also other relations, like e.g. integrating one-year-kindergarden into the first two years at school.

comparing, than to the other cantons, not to an allegedly ideal system. Not the distance to the ideal is decisive but the coherence of projects.

In Zurich, seven fundamental maximes are behind the projects:

- 1. More autonomy for the single school, school supervision being fundamentally changed.
- 2. Development of competent school managements being authorized to give instructions.
- 3. Special measures for problematic situations, like a high share of children from uneducated families and speaking foreign mother tongues.
- 4. Changing lesson-oriented school: integration of services relating to social education and school psychology.
- 5. New orientation of teacher's training towards subject-specific and supra-subject-specific standards.
- 6. Use of educational research for system control.
- 7. Development of new tools.

In the following I will basically refer to three projects, i. e. the development of competent school management, external evaluation, as well as new tools for school development. These projects are matured enough to allow careful conclusions. And they may be of interest also for a Japanese audience.

## 2. Development of School Management and External Evaluation

In respect of the situation of schools in Zurich, some special aspects must be taken into consideration: in Zurich, the term "Volksschule (basic primary and secondary school)" means the complete obligatory time at school, being divided into primary school (first to sixth year) and a structured secondary level (seventh to ninth year). The structure of the secondary level includes three levels, not two like in other cantons. Change to grammar school happens either after the sixth<sup>3</sup>, eighth or ninth year. The vast majority of all children, however, attend basic primary and secondary school. The share of students at private schools is below five per cent, at primary school almost two per cent. The average size of classes is about 20 students, the share of A level graduates is at about 19%, the share of foreigners is about 25% per year on average, with the exception of special classes.<sup>4</sup> According to the local situation there may be great differences.

In the context of the Zurich reform project "Teilautonome Volksschulen (Partly Autonomous Basic Primary and Secondary Schools)", in short "TaV", new kinds of school management have been developed. This project was developed in the context of the administrative reform of cantons, which was planned while following principles of *New Public Management*. Participation in the experiment was voluntary, the time of the project was three years, first schools completed their work in the year 2000. Until mid-2004 seventy communities as well as the cities of Zurich and Winterthur participated in the experiment, a total of about 200

<sup>&</sup>lt;sup>3</sup> After this, there is changing to so called "sub-grammar schools" taking two years. Then there follow four years at grammar school. Not all grammar schools have sub-grammar schools, in the Canton of Zurich they are 11 out of 21. There are no grammar schools following the german example.

<sup>&</sup>lt;sup>4</sup> Here the share of foreigners is 58% (data according to: Die Schulen im Kanton Zürich 2002).

<sup>&</sup>lt;sup>5</sup> The short form fort his reform is *wif!* And means "Wirkungsorientierte Führung der Verwaltung des Kntons Zürich (Output-oriented direction of the administration of the Canton of Zurich)". The basic ideas and procedures of this reform are regulated by a law which was accepted by the Zurich voters on December 1<sup>st</sup>, 1996. Guidelines and regulations of this reform are also valid for schools and universities in the canton, as decided by the voting public by way of a referendum, who before had also abandoned special regulations for civil servants. This far-reaching administrative reform, based on flexibilization, target control, assessment of performance, and constant evaluation of quality, was the precondition of changing school organization to a similar great extent.

autonomous school units from the field of basic primary and secondary schools and kindergardens. The project was completed at the end of the year 2004 and provides the basis of a new law on basic primary and secondary schools, which was voted on in June, 2005. The law was accepted by more than 70% of voters, the first bill having been rejected three years before. Thus, it is worth the effort to have politics correct themselves.

"Partly autonomous basic primary and secondary schools" were not introduced by issuing a decree but were developed which much effort. It is important to mention this, as quality assurance depends most of all on developmental work. What are the results of the project in respect of school management? The Zurich "partly autonomous basic primary and secondary schools" are based on the idea of flexibilization and of shifting responsibility to the local action unit, whose management gets special competences. In the course of this it became obvious that "flexibilization" cannot at all be denounced as a neo-liberal pipe-dream which can only result in disadvantages for schools. In the course of developing "partly autonomous basic primary and secondary schools" there has partly been achieving far-reaching flexibilization, by help of which local school management was supported. They are provided with power and competence, that is they are not any longer only a particularly burdened member of staff without the right to tell anybody what to do.

With the project proceeding, the new managements were increasingly established as an essential element of school development. They replace the old "Heads of House" of basic primary and secondary schools, who had to get along without particular rights and in most cases were only burdened with administrative work. Altogether, the new system is widely accepted among teachers, first difficulties having been overcome, none of the more than 200 experimental schools having left the project, and none having returned to the old system after the experiment. The effects of the experiment occur at the single schools, that is not only by evaluation reports. One also recognizes that nothing can simply be decreed and that the reform must be accepted by teachers. They must be able to find advantage in that what changes.

Other than the old Heads of House, the new school managements experience an "enormous increase of competence", as one evaluation study has it

(RHYN/WIDMER/ROOS/NIDERÖST 2002, p. 79). This pays off: most of the old Heads of House do not have any relief from lessons, more than half of school managements of the project schools<sup>7</sup> has a relief of more than seven lessons (ibid., p. 98). School managements are burdened mostly "by the to-ing and fro-ing of lessons and school management activities", lots of administrative work and the time needed for it (ibid., p. 127). But: the earlier a school joined the reform project, the more tasks are there for school management for which it – and *only* it – is responsible. Thus, they establish their influence and extend it, and this obviously in an irreversible way (ibid., p. 132).

There are other effects: meanwhile the basic ideas of school autonomy, originally much debated among teachers, have gained "wide acceptance" (ibid., p. 94) among different groups of actors, *due to* working at the project and also to better distribution of burden. In the field of "school development" teachers and managements of the experimental schools even come close to their ideal of how to distribute responsibilities (ibid., p. 90). This confirms the result of an earlier study, according to which the activities of school managements is judged positively because there is providing for reasonable distribution of work (ibid., p. 102).

<sup>&</sup>lt;sup>6</sup> In 1997 22 schools participated in the experiment, in 1998 there were 29 more, in 1999 there were another 33, in 2000 another 23, in 2001 another 40, and in 2002 another 45. Until 2004 one third of all classes were participating in the experiment.

Project schools are of different size and are also provided with different equipment.

Generally, teachers also back up the project spiritually, the more they have experienced the process at their school to be sustainable. They cannot be convinced in an abstract way, but they will increase their own burden if they feel to be confronted with a reasonable and productive reform. At the project schools there is no waste of school performance, parents judge these schools to be more positive than parents at schools not participating in the project (MAAG-MERKI 2000).

Still, the essential business of teachers are lessons. School management is responsible for job advertisement, occupying deputies, as well as co-ordinating further training, something which is appropriate to change from need towards demand. Teachers' quality development must take the schools' demands into consideration, and this requires competent school management. In the wider sense they are concerned with the development of administration as well as with public relations, and school management is also involved in occupying posts. In respect of the teacher's lessons, change of responsibility has been started. School management is allowed to work out and enforce conventions, e. g. regarding common regulations for and ways of marking at their schools, they visit lessons and take over tasks of personell planning, all of which may have or has effects for teaching (RHYN/WIDMER/ROOS/NIDERÖST 2002, p. 141).

Among the new tasks and competences of school management there count e. g.:

- Deciding about start and end of lessons, about distribution of lessons and subjects during the week and the year, about blocks of time, breaks, projects, and workshop lessons,
- minimalizing lessons for certain subjects in favour of cross-subject activities,
- distributing the students among groups of mixed age and departments with several classes,
- at the primary level, organizing learning groups according to performance, sex, or interests for single projects and shorter periods,
- more flexible employment of teachers, exchange among subjects, and increased distribution of smaller sub-tasks.

In each case this must be co-ordinated with the staff, and just due to this it is a complex managerial task. Not all of these measures will be immediately successful, and not at all at the same time. The development of quality at schools must always start out from different points of view and must take different interests into consideration. For teachers, their daily business is in the fore, and reform will have to be judged by their contribution to daily business.

Regarding experiences with new school managements, it is possible to derive some generalizations from previous experiences, which may be supposed to be interesting also beyond the Canton of Zurich. New ways of organization do not automatically improve the quality of teaching, but teaching depends on school being qualitatively well organized. Without school management having competence and authority to issue instructions quality assurance will only be coincidentally or individually. It would be dependent on single teachers' commitment, something which may wear down or suddenly shift, as we know well. But the improvement of the students' average quality of education – *the* demand after PISA – cannot be left to single teachers' agreement or rejection but refers to high need of control and thus to management.

To have it more generally and refered to teaching: local school development must be coordinated with the environment and must be accepted, this requires management, as general goals are pursued and teaching is obliged to topical standards which cannot be arbitrarily individualized. Teaching aids are not enough for control, goals and standards of teaching must be co-ordinated, explained in a way as to make them transparent, and must be controllable. Common guidelines for marking – today *not* common practice among schools and almost a revolution – are only a start. In future, also response must be processed, schools will learn how to deal with results, results must be combined with measures, all this requires competent school management.

If one tries to summarize experiences, one says: more autonomy for the single school requires more management and other ways of controlling, on the other hand. Teachers do not like the word "control" very much. Here, it means response on the state of development and local problems which might be exploited by school. In future, tests will be counted among them, but also external evaluation. Also this expression causes frowns and resistance among German teachers, while in Switzerland, on the other hand, there happens developmental work about which I would like to report shortly in the following. Also this project of education policy will slowly become reality in Germany, so that also here a look at the neighbour is worth the effort.

External evaluations are a far-reaching change of controlling schools, which in its basic form comes from the 19<sup>th</sup> century and not coincidentally is called "inspectorate". An inspector<sup>8</sup> controls but does not develop; the new problem is how to bring control and development together. "Control" must not be taken literally, it is not about commissioners visiting schools but about experts which a critical eye in order of helping the single school. These experts are independent and may discuss what they find worth discussing; there is no loyalty towards the staff.

Here there starts out another project in Zurich, that of "Neue Schulaufsicht (New School Supervision)". This new procedure understands school *supervision* to be a part of school *development*. By this, the following is meant: in future, all schools are supposed to be externally evaluated every four years. These data will describe strong points and weak spots, they serve for further development of schools and will be implemented by target agreements. This concept requires three main actors, i. e. evaluation teams, school supervision in the communities, and school management. This concept could not be enforced by help of "Heads of House" of the old kind. Only by help of these new school managements a long-term development based on target control can be achieved, which must be implemented in a responsible way, that is they are not simply based on tacid understanding among staff members.

Since 1999 the model of "Neue Schulaufsicht" in the Canton of Zurich has been tried out at more than sixty schools, all of which volunteered. The appropriate authority carries out standardized evaluations which are ordered by schools in co-ordination with their supervisors. This external evaluation requires self-evaluation by the school and is carried out by teams of the "Neue Schulaufsicht". The procedure and its conditions can generally be described as follows:

- The teams of "Neue Schulaufsicht" are independent, they work on behalf of the authority but do not obey any orders.
- Evaluations are carried out in a way as to make criteria and methods, which are disclosed before, as transparent as possible.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> The Latin verb *inspicere* refers to "looking inside", "muster", or "investigate", i. e. to an object or a situation which themselves are left to be passive.

<sup>&</sup>lt;sup>9</sup> Meanwhile, a special handbook has been published fort his purpose (Verfahrensschritte 2001).

- Schools write reports on self-evaluation, the evaluation teams visit schools, collect data, and themselves present reports which will be the basis for further proceeding.
- In a target- and development-related way evaluation reports are discussed with the staff as well as with parents and students.
- On this basis, school management and school supervisors agree on development goals and speacial measures for the following report period.

The "Neue Schulaufsicht" was itself evaluated. Data show that such a procedure is accepted mostly by those schools which feel to be taken seriously and which experience that and in which way they gain profit from the originally feared external evaluations. Schools support the project and judge it to be a gain of quality. The methods of data-collecting are judged to be reasonable, and results achieve high credibility. There are still difficulties with determining consequences exactly, not in every case the evaluation reports are the basis of effectful target agreements and thus of a purposeful development policy of the single school. Another flaw is the fact that teaching is taken too little into consideration, due to lack of time (BINDER/TRACHSLER 2002).

In this sense, also projects of external evaluation depend on one's own development. They learn by their own practice. For example, a language must be developed which is clear enough to also discuss weak spots without offending the evaluated school. Or, ways must be found how schools could react to weak spots. If matters simply come to a halt with the report, or it is "drawerized", as we say in Switzerland, it will be to nobody's advantage. On the other hand, schools must be able to act, something which would provide further training on a new basis. The latter must have offers ready "on demand" which schools may call for. This way, external evaluation would also result in consequences for training or personell planning.

Essential for quality development, however, are not only new ways of organization, like competent school management or development control by external evaluation; it is also and not at last important to have suitable tools at hand which are indeed accepted by teachers. This dimension has been constantly underestimated by German education, meanwhile, however, also there there are dynamics capable of sustainably changing practical work.

## 3. Basic Level and New Methods from Practical Work

One essential result of research, which is about appropriate to the German results of the IGLU study, is the performance gap after the third year. Between the third and the sixth year, that is with increasing subject demands of lessons, the great discrepancies and differences, which were also described by PISA (MOSER/RHYN 2000; MOSER/KELLER/TRESCH 2002), are obviously created. It will be one of the great problems to minimalize this gap-effect<sup>10</sup>, something which will only be possible by help of effectful and early support programmes. These programmes require turning away from pure lesson school and also require complex developmental work.

Who wants to achieve better practice of support for all students is not confronted with an easy task if we consider that students' competences for the decisive subjects are widely apart from each other already when they start school (MOSER/STAMM/HOLLENWEGER 2005) and that each class develops a hierarchy of performance whose distribution of rank will most

<sup>&</sup>lt;sup>10</sup> This effect is not only due to the original milieus of students, which also the Swiss PISA-data have proven to be an essential but not the only factor for performance (Bildungsmonitoring 2002).

probably be kept up even if teachers change. Putting support to the test means changing this hierarchy, in which most of all the best students are highly interested. It is the essential question of an extended school experiment, which is currently carried out in different cantons and which is supposed to try out earlier start of school, how under such conditions support could be improved.

The keyword is "basic level", where kindergarden and first year at school are supposed to be newly orientated. It is not about bringing forward school in today's sense but about developing a new level to support the children's potentials more purposefully and at an earlier stage. This is the case in many European countries, only in Switzerland and Germany curriculum support of learning starts at such a late time, i. e. at the age of six.

In other countries it has been common for a long time to provide offers for younger children, which stimulate learning in an age-appropriate way and by way of new sceneries. In more detail, "basic level" could mean the integration of kindergarden and period of starting school, while according to each case distinguishing models which include the first year or the first two years.

The main reason for this becomes obvious by research on children's learning potential before school. Small children ask in an original way, they learn stubbornly, they want to know, and they discover the contexts of their environment. It would be a waste not to start out here purposefully. The fact that performance at school is not always satisfying at the end of school is a. o. due to the fact that at the beginning of the learning career there was no sufficient and most of all no individual support. The image of the playful child is one-sided and should be replaced by the image of the asking child, waiting for answers and learning from them. Obviously, other educational systems have already reacted to this fact. All over Europe the cognitionless kindergarden seems to belong to the past. What is pushing through are mixed forms of playful learning and comprehensive support, among which there definitely count also cognitive learning offers.

Accordingly, some Western countries introduced framework curricula for the pre-school field, for which up to now there have been only a few regulations. An analysis of these developments shows that certain standards for organizing this field are indispensible, without this leading to a "schoolization of childhood". Support during early childhood requires very flexible and individualized kinds of curricularization, and the international development shows that exactly this is possible if there are enough resources at hand, if teachers are professionally trained, and if enough evaluation data are at hand. However, it is not possible to simply adapt foreign models. Much more, the basic level must be put through a test period where experience is gained about in which way this new system could be carefully and at the same time purposefully introduced. This demands intensive co-operation with parents, who must be convinced of this new offer if it is supposed to be successful.

Teachers' training must be adjusted to this new task, and the test period must be thoroughly evaluated. The two cultures, kindergarden and period of starting school, need not to be "fusioned" but to be rhythmically related to each other. This demands unusual teamwork and cannot be done without additional resources. The main problem will be to accept the increasingly great differences of children's preconditions and lerarning behaviour and to transform them into support. Children have a highly different speed of learning, "support" is not a principle of giving everybody an equal share but indeed an individual offer allowing to pass the basic level with more or less speed, without putting children under undue pressure to perform. They shall be able to have their own pace.

On quality assurance on teachers' side, different ideas have been developed, one of them dealing with *best practice*. In respect of quality, teachers are considerably different from each other, everybody knows that there are better teachers and worse teachers, only that up to now this has been a taboo which was not to be questioned. The Swiss think-tank *Avenir Suisse* ordered a study which, starting out from measuring their performance, displays differences between teachers, that is it traces better or worse performance by students back to their teachers' competence (MOSER/TRESCH 2003). From such studies there would conclude to have teachers gain profit from the professional skills of the best in the field. This is not possible for teachers from one and the same school. But if every kind of insult among collegues is avoided, know how might be transfered directly.

Teachers must compare themselves to others, their personal competence in respect of teaching, not only anonymously their class's performance to that of other classes, as it is the case with class cockpit. As a result it becomes obvious that teachers gain profit from this kind of coaching if they allow the results to approach them and if they are open towards the fact that others are better than themselves, but that also they are able to learn how to improve their own competence. According to the study, the quality of teaching is high if the teacher structures learning according to the possibilities of the class, if he/she sufficiently focuses on the teacher, supports by way of appropriate dosage, discloses clear performance demands and transparent criteria of marking. Teaching will never be good if he/she simply refers to didactic methods and models. Teachers must find the right mix which is appropriate to their situation, most of all this makes the art of good teaching.

From this study there comes another project which is called "Check Five". This is the name of a comparative performance test in the Canton of Aargau, carried out in the fifth year of primary school. The project was ordered by the Canton Parliament and serves for developing a tool by help of which the results of evaluation studies could be communicated back to teachers. Also Swiss teachers were only slightly moved by the results of PISA. This can be seen e. g. by the fact that they hardly contributed to the public discourse; but if such lavish studies are supposed to have practical and not only political and scientific value, the question cannot be avoided what teachers are able to do with such data. "Check Five" is an answer to this.

The test was carried out last year and included four dimensions, i. e.

- Mathematics,
- German language,
- co-operative problem solving,
- and self-organized learning.

As there are political intentions behind this test the project team expected considerable resistance among teachers and would have been satisfied with 40 classes to take part. Out of 370 teachers teaching in the fifth year in the Canton of Aargau 262 volunteered, in the end the test was carried out with 140 classes and 2,531 students. Obviously, such methods are basically accepted. Before the tests were carried out, teachers were asked about their attitudes and expectations towards the project for which they had volunteered.

Two months after the test each teacher received a response telling about how well his/her class had done in comparison to the total result. The result was structured by "minimum goals" set by the curriculum. They can be achieved, not achieved, or exceeded. The results

must be communicated to the students in a freely chosen way. For this, teachers may as well include parents. The response included a pre-structured part on follow-up measures, where there is distinguishing – according to categories – at which levels and in which fields teachers may become active when knowing about their results. This way, actions can be anticipated and classified, which also makes evaluation easier. After the results had been responded there were two more surveys on implication.

They have four main goals:

- How do teachers deal with the data of their classes, especially if they are not good?
- How do they analyse the causes?
- How do they reflect on the quality of their teaching in light of the data?
- And what are their measures to improve quality?

Meanwhile the project has been completed. One result is as follows: the method of purposeful response is widely accepted among students, something which can also be concluded from other studies. Objectivated, transparent methods of measuring performance are no horrible experience but effectful tools if the data can be re-translated into the field and reach teachers. From this point of view the primary gain of the PISA studies is not in enriching the publication lists of researchers but in improving practical work knowledge.

But school development is also possible below the level of educational standards, external evaluations, and a complex organization of quality assurance. At the end of my lecture I will name quite simple measures already realized or currently being developed at Swiss schools. They are measures of improvement which can be employed everywhere without much costs. These four measures are a reaction to criticism which this way is taken seriously and which improve the relationship of school and its environment. I might also say that this way schools become more customer-oriented, and this is something the school system should not simply leave to private schools.

What is again and again reproached by parents – and in my opinion rightly so – is a lack of transparency in respect of the students' performance development. When reports are handed out it is too late to interfere with this development, something which many parents would like to do when not satisfied with their children's responses. This is due to the phenomenon that many students prefer waiting for bad reports instead of changing their performance attitude. Intransparency is a short-term advantage, while parents often suspect what is lying ahead. There are Swiss private schools telling parents about their children's performance every four weeks. These schools provide data-banks where every teacher fills in the marks for written tests. Then the parents regularly receive a statement informing them about the situation and which they must sign. They are then able to think about which strategy to use if performance is satisfying neither for them nor for their children.

Another frequent nuisance is lack of transparency both regarding learning objectives and demands. Also this can be helped. Some schools give written information to their students every Friday after the last lesson, telling about next week's objectives, about the demands they will be confonted with, and how much time they will need to achieve good results. Students write learning diaries and are thus able to control their progress themselves. Transparent objectives make it possible for them to organize their time without being surprised by the progress of teaching. This way, schools demand active behaviour towards learning and account for their progress towards the objective.

One possibility for this are systems of direct response, called "learning passport" by some schools. They serve for mutual co-ordination and control of behaviour.

- Every day or on fixed days students write down which objective they want to achieve at that day in a certain subject.
- At the end of the day they record their achievements.
- According to fixed categories, they make estimations about their work and learning behaviour.
- The teacher receives a response, telling about resources and learning aids having been sufficient.
- As a conclusion, students receive a response by their teachers about how the latter judge on the day and their performance.

My fourth example tells about an experiment at a Zurich grammar school, which was carried out in the semester 2004/2005 and which was externally evaluated (BINDER/FELLER-LÄNZLINGER 2005). This experiment is called "Selbstlernsemester (Semester of Self-Learning)" and was carried out at a long-term grammar school in the Zurich Oberland. The year is about equivalent to the eleventh year at a German grammar school. During the complete semester for students there there was no lesson-related teaching in the basic subjects of German, Mathematics, French, English, in the key subject (Greek, Latin, or Physics), as well as in Physical Education. They were supposed to learn without daily and direct assistance by teachers.

"Instead of the weekly number of lessons for each subject" students were given "a semester task including exercises and defined learning objectives which were to be worked on independently or in teams. Assistance by teachers was by weekly meetings with their teachers or direct personal contact", partly also by way of e-mails, between teachers and students. "Assessment and judging on having achieved the learning objective were done by way of different kinds of examinations" (ibid., p. 7).

While being compared to a control group, the results were described as follows:

- 1. The fixed learning objectives were achieved for all eight subjects and to the same extent as in the case of normal teaching. Only in two language-oriented classes the students found Mathematics to be more difficult.
- 2. The semester tasks were suitable learning-guidelines for all classes.
- 3. During the second half of the semester the assessment of learning objectives was a heavy burden for the teachers.
- 4. It needed much effort to explain the ways of assisting with learning to the teachers.
- 5. According to the judgements of all participants, the students were able to develop not only subject-related but most of all also cross-subject as well as more demanding learning strategies.
- 6. All participants judged the semester of self-learning to have been a positive experience. Almost 70% of the students stated that this way they had been able to learn better than in usual lessons. (ibid., p. 4/5)

Along this line teachers stated in the interviews: "For me it was a sobering experience. The students didn't need me ... Often they did not want us to have a look at how they were learning ... They did not want me, being a teacher, to intrude into their world of the learning group" (ibid., p. 26).

These are practical ideas for improving the quality of schools and in connection to this a reaction to changed the environmental conditions of the average school. Today, schools must themselves develop their students' ability to learn, thus it is not surprising if now there is interest in new tools which on the one hand define clear rules and determine processes, but on the other hand just due to independent activity are a challenge for students.