

# Peer Review in School Self-evaluation: Cultivating Skills in Data Use

#### **Abstract**

This paper is focused on peer review used by schools as a potential means of support for mutual learning and the development of staff professionalism. It is based on empirical material obtained from *The Road to Quality Improvement*<sup>1</sup>, a Czech national project designed to support self-evaluation in schools. Data from 32 schools were collected by questionnaire surveys, interviews, focus groups and document analysis. Main findings are as follows: (1) a prerequisite for successful peer review is previous experience of evaluation activities and work with data; (2) peer review develops participants' sensitivity in terms of the need for the development of evaluation skills; (3) evaluation activities and work with data develop participants' professionalism and their potential to contribute to school development.

**Keywords:** *peer review, work with data, evaluation activities, professionalization, school development* 

## 1. Introduction

The changing requirements for schools and their work accentuate new or, in some instances, repeated questions of quality and effectiveness of the work of schools, their development and their multilateral accountability. The combination of outer pressure on schools and support of schools' efforts to improve their work

<sup>&</sup>lt;sup>1</sup> Cf. http://www.nuov.cz/ae?lchan=1&lred=1

from the inside (Davidsdottir & Lisi, 2012; Fullan, 2001; Leithwood, 2001) seems to be an efficient strategy to ascertain the quality of learning and other aspects of school work. These processes should be backed by professional decision-making based on suitable use of relevant data.

It is data generation in schools in particular that some of the currently promoted processes in schools are used for, usually within self-evaluation. Peer review is identified as one of them (cf. Gutknecht-Gmeiner, 2008). In this article we will study peer review processes, presenting them as a specific way of work with data in schools and drawing attention to their application in the context of Czech education.

## 2. Peer review: context, definition and specific adaptation

Peer review is often defined as a professional model of evaluation in which members of a profession are invited to evaluate the performance of other members of the same profession (Goldstein, 2004; Verdung, 2009). It may be either evaluation of the work of individuals or groups or of whole organizations and institutions or their parts. Peer review is an internally structured process of sensitive work with data, consisting of a succession of logical steps (cf. Guide, 2004). In the framework of peer review, the requirement of complementariness of internal and external evaluation (Nevo, 2001) is fulfilled remarkably well: "external" evaluators usually start with self-evaluation reports by those who are to be evaluated (cf. Gutknecht-Gmeiner, 2007; Vanhoof et al., 2013).

In the project *Road to Quality Improvement*, the starting point for peer review was the methodological manual for European peer review (Gutknecht-Gmeiner, 2007), which was later adapted for the needs of the project under Czech conditions (Kekule, 2012). The process of peer review consisted of four stages: (1) Schools were familiarized with the details of the planned procedure. They agreed on a time schedule, conditions of the visit and the choice of quality areas to be evaluated. The evaluators obtained self-evaluation reports and other documents to study (annual report of the school, school educational programme) from schools. (2) A visit to the evaluated school followed. Data were collected with the use of prepared methods. (3) After the visit to the evaluated school, evaluators wrote a preliminary version of their report. The report was commented on by the evaluated school and given its final shape by the evaluators. (4) The evaluated school was supposed to transform the results and recommendations of the evaluation report into specific activities for improvement, i.e. to plan and perform them.

Throughout the process, including the visit to the evaluated school, a facilitator was at both teams' disposal. He/she was present during the process, moderated the evaluation visit and assisted in the elaboration of the evaluation report.

## 3. Methodology

The *aim* of our research was to study the development of skills and professionalism of those involved in peer review. By means of several methods, the participating staff members were confronted with collegial evaluation, and this was observed. We assumed that voluntarily participating schools would have positive experience of self-evaluation and look at collegial evaluation as an opportunity to further develop their school.

There were three *samples* that were subordinate to one another and differed in their size and the depth of research methods applied.

- 1. In June 2009 we addressed all basic and secondary schools in the Czech Republic by means of a questionnaire. The questionnaire was answered by 531 schools. Due to the low return rate (approx.8%), it was at this early stage that the inclination of the sample towards schools with a more positive opinion on the importance of self-evaluation was formed. Interest in peer review was expressed by 21% of the respondents.
- 2. The schools that expressed interest in peer review were invited to an initial informational meeting. Six meetings were organized, some of which took place in June and others in November 2010, attended by a total of 207 representatives of 46 schools. In the end, 32 schools participated in peer review (26 primary schools, 2 middle schools, 4 secondary technical and vocational schools). Altogether there were 28 events attended by 128 representatives of the participating schools. Of the participants, 53% were school leaders (head teacher, deputy head), 17% were teachers coordinating more activities at the school (guidance counsellors, school educational programme coordinators, ICT coordinators) and the remaining 30% were other teachers. Evaluation reports from the performed peer reviews were subject to content analysis. We asked the participants to fill in anonymous surveys. All five facilitators submitted written reports on performed peer reviews. When all the events were finished a focus group was held with the facilitators.
- 3. Of the sample of schools participating in peer reviews in 2011, we chose 4 technical and vocational schools in which more profound research

was carried out using participatory observation and interviews with the participants.

In sum, we used a variety of methods:

- 1. Questionnaire surveys. At the end of every peer review evaluation visit, which lasted one and a half days, both the evaluators and the participants from the evaluated school obtained questionnaire surveys. Part one of the survey consisted of 4 questions focusing on school autonomy, feedback during self-evaluation from various stakeholders and continuation with peer reviews after the project *Road to Quality Improvement*. Part two of the survey was focused on peer review evaluation: fulfillment of expectations related to peer review, usability of experience/knowledge of peer review for further practice, and organizational backing. Between October 2010 and May 2011, the survey was answered by a total of 181 respondents (85% of the participants). Of these, 23 % were head teachers, 27% were deputy heads and 47% were teachers (3% did not specify their positions).
- 2. Content analysis of peer review evaluation reports. Within one month after the evaluation visit the evaluating school provided the evaluated school with an evaluation report. The aim of the analysis of these 28 documents was to understand which quality areas were focused on by the schools, which criteria and questions were chosen by the evaluating teams for evaluation, which evaluation methods were used, what was appreciated and what was recommended for further development in the evaluated school.
- 3. Content analysis of facilitators' reports. While the evaluators provided the evaluated schools with their reports, the peer review facilitators submitted theirs to us. They provided information on how the event was proceeding, its benefits, barriers and implementing difficulties, their own support to schools during peer reviews and their needs as experts who assist schools in evaluation activities.
- 4. Focus group with peer review facilitators. To get a more profound insight into the information received from the content analysis, a focus group was held in September 2011. Its participants were the 5 facilitators and 4 project leaders who carried out a random check of the peer reviews being performed.
- 5. Participatory observation. Between February and April 2011, four peer reviews were performed in the vocational schools which became subject to participatory observation after a previous arrangement with their leaders. The aim of our observation was to describe the course of the peer review, assess the competences of the peer review evaluators, check the conditions for the evaluators, and record the immediate impressions of the participants.

6. Semi-structured interviews. One month after the peer review was performed, semi-structured interviews were conducted with the representatives of the 4 technical and vocational schools involved (school heads, their deputies, and teachers). The aim of the interviews was to learn about the peer review competences of those involved and the benefit of the peer review for the school, to assess the conditions for peer review and describe what the school has learned from the peer review.

#### 4. Research results

We can formulate the following theses in regard to the development of skills and professionalism of peer review participants:

# 1. A prerequisite for successful peer review is previous experience of evaluation activities and work with data

This thesis is grounded in the findings obtained from the surveys, the focus group and facilitators' reports. In the *surveys*, the respondents talked about their experience of school self-evaluation. A question specified that one cycle of self-evaluation comprised activities from setting priorities through realization and evaluation to the proposal of measures for improvement. A fifth of the respondents had experienced three or more cycles of self-evaluation, almost a half had gone through two cycles, and a quarter of them had undergone at least one such cycle. A mere 4% of the respondents had not had any experience of at least one completed cycle of self-evaluation in their schools.

Even if the schools involved in peer review were experienced in evaluation activities, the *focus group* revealed that it was not an easy task for those participating: they asked the facilitators many questions, which indicated their limited skills to evaluate. The schools involved in the peer review activities faced the difficult role of those who have to offer feedback to partner schools. To acquaint the evaluated schools with the results of evaluation not only required **skills of planning, collection and interpretation of data**, but mainly of **communication**. The participants in the focus group commented their uncertainties as follows:

It's necessary to have more visits before the peer review starts. The short training programme is at the expense of quality, then it's just superficial. They plugged away at it.

For self-evaluation and school networking, insufficiently trained teams can be risky even if the prerequisite of voluntary pairing is fulfilled.

Half of the *facilitators' reports* stated that the peer reviews had gone on faultlessly (as for the organization of peer review, the course of collecting information, the evaluation itself, and more). The other half of the peer reviews were performed with minor problems, the facilitators said. Problems occurred in (a) peer review planning and (b) the way in which the evaluation was carried out.

Sometimes schools didn't have anything to talk about and it was just superficial. If the teachers went to see lessons, there were things to talk about. If there were just presentations about their school, they got lost.

# 2. Peer review significantly develops participants' sensitivity in terms of the need for the development of evaluation skills

This thesis is based on the results of interviews with the participants, the evaluators' reports, and the focus group. During *interviews* after the peer reviews, the participants often **evaluated positively the skill of working with methods of data collection**, both their own and the evaluators'. Specifically for the evaluators they mentioned: (a) their ability to get acquainted beforehand with the model of school management they would discuss during the visit; (b) that they were ready to collect information by means of a suitable structure of questions; (c) that they did not preach during the evaluation but. adhered to opinions of unbiased, independent persons, and identified what was good and what should be reconsidered in the evaluated schools. The respondents sometimes evaluated positively and specifically their own skills in evaluating the school.

... we managed to work out the final report so that it was really not aimed at anyone who would suffer some harm by it.

On the other hand, the respondents often perceived certain **deficiencies in the work with methods of data collection**, again both on their own part and that of the evaluators. These deficiencies consisted in: (a) asking suitable questions during interviews; (b) work with questionnaires — aggregated assessment of the results; (c) ability to communicate the results of the evaluation to the evaluated schools. A head teacher member of a team of evaluators said:

It's difficult that you keep rationally to the scheme, don't digress, have all the points you want to come to in that scheme, so that the interview is

not too restrictive, so that your partner has got scope for expression and, at the same time, it doesn't get too protracted, leading to a kind of interview which simply gets too far from the original subject.

Next, the evaluation teams stated in their *reports* that their main means of **obtaining data for evaluation** were school visits; interviews with school leaders, teachers and sometimes also with students; classroom observations; document analysis. Once the collection of data was complete the evaluators held a brief consultation over the received data, aiming at immediate feedback. After writing a report, data were analyzed in greater depth with the facilitator's assistance, with special regard to the wording of the proposed measures for improvement.

During the *focus group*, the participants said that — despite the training for self-evaluation never being considered completed or sufficient, and although the facilitators identified a variety of deficiencies and doubts which the people at the schools expressed or indicated — they had already known a lot about self-evaluation, at least in the participating schools. What is rather lacking, however, is further improvement of specific skills which are not easy to learn.

People do know something now, but they need supervision. You can't stop if you have basic training in self-evaluation, you've got to continue somehow.

# 3. Evaluation activities and work with data develop participants' professionalism and their potential to contribute positively to school development

This thesis is based on the findings obtained from the facilitators' reports and interviews with the participants after the peer reviews. In their *reports*, the facilitators explicitly pointed out the following **characteristics of the benefits of peer reviews for participating schools**: (a) exchange of experience and inspiration; gaining of specific recommendations; receiving of feedback from schools of the same or similar specialization; (d) encouragement, appraisal, words of support for further work of the school; (e) development of evaluating skills; (f) agreement about further cooperation of the school. The representatives of the evaluated schools usually realized the importance and significance of self-evaluation. The evaluators acknowledged improvement in their ability to evaluate using specific methods, i.e. to offer descriptive feedback to colleagues at an equal level, try asking questions, conduct an interview, create and evaluate questionnaires, and carry out relevant observations in classes of colleagues previously unknown to them.

During the *interviews* after the peer reviews, the participants often identified the benefits for themselves, individually, but also, institutionally, for the school. At the level of the individual, the benefits included learning how the same activity is done elsewhere; attaining personal contacts usable for prospective cooperation (e.g. opportunities for consultation on certain problems, participation in competitions and events); learning about personal strong points which the evaluated persons do not realize, considering them obvious. The benefit for the school consisted of items such as: confirmation of the strong points and drawbacks of the work of school leaders and the staff; recognition of what is not obvious in other schools, but positive for the work of the school; gaining a partner school for future cooperation.

After this activity we sat down and talked about what it was good for. It was simply great. I couldn't find any negatives, just positive points. We entered into it saying it would be the critical view of a friend who would want to show us something, to show us a mirror. I think this is exactly what happened.

## 5. Discussion and conclusion

Peer review proved to be a relatively efficacious means of work with data in the schools. Peer review mainly indicated its potential in the following areas: (a) participants' development in work with data; received feedback about an agreed area of quality from a team of evaluators from another school; (b) exchange of experience in specific areas of school operation, inspiration from what works well in another school; (c) practicing methods of data collection for evaluation (interviewing, observation, analysis of documents); (d) acquisition of a cooperative partner school; development of social relations among participants.

Peer review was successful if the following main prerequisites were met: (a) peer review was planned in a proper way (a suitable partner school was chosen, intensive communication between school representatives took place before the visit of the evaluators so that schools could agree on the areas for evaluation); (b) the participants had previous experience of self-evaluation in their schools; (c) the participants applied organizational skills, especially during the evaluation visit (managing a tight schedule, etc.); (d) the members of the evaluation teams were experienced in data collection methods (interview, classroom observation, document analysis); (e) the participants used communication competences (they

could acquire information, negative or positive, and communicate their findings properly).

Also, the facilitators who led the evaluation process proved to be very helpful. If one or more of the above prerequisites were not met, usually the following problems occurred: (a) evaluation was superficial; (b) the time demands of the visit were underestimated; (c) data collection methods, especially the interview, were not used in an appropriate way. There is a permanent threat of pseudo-evaluation over peer review efforts if these are not carried out with sufficient thoroughness (cf. Stufflebeam & Shinkfield, 2007; Pol et al., 2012).

This confirms some of the theoretical knowledge about the potential of peer review. The participants saw in peer review a combination of outer pressure on the school and, simultaneously, support for the school so that it could improve its work from within (Fullan, 2001; Leithwood, 2001; Dvořák, 2012). As in the project on peer consulting (Vanhoof et al, 2013), they appreciated that similar schools could meet and have an opportunity to learn from each other. The findings in regard to the characteristics of the evaluators confirmed the assumptions of the peer review manual (Gutknecht-Gmeiner, 2007), requiring from the team of evaluators that they should have knowledge and experience: (a) in the field of teaching and learning; (b) in the field of detecting and development of quality; (c) in the evaluated areas of quality.

On the other hand, the focus group and facilitators showed that especially concerning problems with communication, no matter how rare, when schools could not manage to offer or accept evaluation in a constructive manner, it is not enough to act according to the above-mentioned method of evaluation. It is necessary to apply the method even with people with limited evaluating and communicational skills and ethical awareness. As it is not easy to take criticism that is expressed inappropriately, a barrier is often created that impedes any further collaboration. Such an experience is then rather harmful for the idea of evaluation. Evaluation was safe for both schools if they worked only on what was mutually arranged by the evaluators and the evaluated beforehand and there was no hidden demand in the air or any other withheld requirement.

With their proactiveness, the level of development in the evaluation processes and focus on the development of quality in education, the schools involved in peer reviews differ from other schools in the Czech Republic in showing willingness to be evaluated by another school.

Peer review is often a promising strategy of school development. Offering significant potential for the development of skills and professionalism of people in schools, peer review can cultivate skills in work with data and improve the quality

of school work. The use of peer review indicated here requires employment of the principles of dialogical and participative evaluation as a process in which all the participants play important roles. External support to peer review is also important.

For the time being, however, peer review actions in the Czech milieu are related to projects creating space for its specific application. Such actions do not remain a commonplace part of school life when projects are finished. This was also apparent in the case described here.

## References

- Davidsdottir, S., Lisi, P. (2012). Spolupráce učitelů a jak ji podněcovat (poznatky z longitudinální a průřezové studie interní evaluace na Islandu). *Studia paedagogica*, *17*(2), 51–70.
- Dvořák, D. (2012) Nový institucionalismus v pedagogice. *Studia paedagogica*, 17(2), 9–26.
- Fullan, M. (2001). *The Meaning of Educational Change*. New York London: Teachers College Press Routledge Falmer.
- Goldstein, J. (2004). Making Sense of Distributed Leadership: The Case of Peer Assistance and Review. *Educational Evaluation and Policy Analysis*, 26(2), 173–197.
- Guide to Using Data in School Improvement Efforts. A Compilation of Knowledge From Data Retreats and Data Use at Learning Point Associates. (2004). http://www.learningpt.org/pdfs/datause/guidebook.pdf Retrieved 20.12.12.
- Gutknecht-Gmeiner, M. (eds.) (2007). European Peer Review Manual for initial VET. Vienna: öibf.
- Gutknecht-Gmeiner, M. (2008) Externe Evaluierung durch Peer Review. Qualitätssicherung und entwicklung in der beruflichen Erstausbildung. Wiesbaden: VS Verlag.
- Johnson, S.M., Fiarman, S.E. (2012). The potential of peer review. *Educational Leadership*, 70(3), 20–25.
- Kekule, M. (2012). Rámec pro vlastní hodnocení školy. Metodický průvodce. Praha: NÚV.
- Leithwood, K. (2001) School leadership in the context of accountability policies. *International Journal of Leadership in Education*, 4(3), 217–235.
- Nevo, D. (2001). School Evaluation: Internal or External? *Studies in Educational Evaluation*, *27*(2), 95–106.

- Pol, M., Hloušková, L., Lazarová, B., Novotný, P., Sedláček, M. (2012). Organizační učení v realitě života školy: impulzy, témata, strategie řízení. *Studia paedagogica*, *17*(2), 27–50.
- Stufflebeam D.L., Shinkfield A.J. (2007). *Evaluation, Theory, Models & Applications*. San Francisco, CA: Jossey-Bass.
- Vanhoof, J. Verhaeghe, G. Petegem, P.V., Valcke M. (2013). Improving Data Literacy in Schools: Lessons from the School Feedback Project. In: K. Schildkamp et al. (eds.), *Data-based Decision Making in Education, Studies in Educational Leadership 17* (pp. 113–134). Dordrecht: Springer Science+Business Media.
- Verdung, E. (2009). *Public Policy and Program Evaluation*. New Brunswick, NJ: Transaction Publishers.

The article was written with partial support from the project "The relationships between skills, schooling and labor market outcomes: A longitudial study" (No. P402/12/G130) funded by the Czech Science Foundation.