Studies in Educational Evaluation 35 (2009) 150–159

Contents lists available at ScienceDirect

Studies in Educational Evaluation

journal homepage: www.elsevier.com/stueduc

Factors influencing the utilisation of a school self-evaluation instrument

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ARTICLE INFO

Keywords:
School-based evaluation
Teacher evaluation
Student evaluation
Evaluation utilisation
Quality care
Performance feedback

ABSTRACT

School quality care has become important in many Western countries and a number of high quality school self-evaluation instruments has been developed and implemented to support this activity. However, little is known on the critical success factors for the use of school self-evaluation instruments. From this longitudinal study into the use of a Dutch school self-evaluation instrument it became clear that schools vary in the extent to which they are able to make use of self-evaluation results to improve school quality. The results from regression and multilevel analyses show that several factors contribute to the use of the self-evaluation instrument, including a positive attitude towards self-evaluation, the school innovation capacity, and the degree to which the evaluation results address the needs of the users.

Introduction

School self-evaluation

School self-evaluation is receiving increased attention in educational research around the world. Although school effectiveness research has provided us with insights into the characteristics of high performing schools, this research neither answers the question of causality nor clarifies how underperforming schools can be improved (Coe & Fitz-Gibbon, 1998). Moreover, centrally developed, *general* school improvement strategies prove not to work in many schools, as schools differ, for example, in terms of the causes for underperformance and in terms of their policy-making capacities (e.g. Fullan, 1998; McLaughlin, 1998). In other words, school improvement proves to be rather context-dependent. As school staff best know their particular school context, i.e., know what is feasible and what is not in their situation, they are likely to be in the best position to be able to say in which areas they would like to improve and then try to accomplish these improvements. A school self-evaluation system is valuable from this perspective: it can monitor schools thoroughly and provide timely, high quality school performance feedback to serve as a basis for school improvement (Coe & Visscher, 2002a).

Based on definitions by Scheerens, Glas and Thomas (2003) and Van Petegem (2001) school self-evaluation is defined by Schildkamp (2007) as "a procedure involving systematic information gathering initiated by the school itself and intended to assess the functioning of the school and the attainment of its educational goals for purposes of supporting decision-making and learning and for fostering school improvement as a whole" (p. 4).

School self-evaluation in the Netherlands

Dutch schools are used to considerable autonomy. Since 1917 they have been free to choose the religious, ideological and pedagogical principles on which they base their education as well as in how they organize their teaching activities (Ministerie van Onderwijs, Cultuur & Wetenschappen, 1999). Since August 1998, the Dutch "Quality Law" prescribes that schools are responsible for the quality of education they provide and for pursuing policies that ensure school improvement. The law also prescribes that all schools must develop a quality assurance system.

As from September 1, 2002, when the new law on the Supervision of Education went into effect, the new role of the Inspectorate was also laid down by law. For schools and governing bodies the most important stipulations relate to extending the competencies of the Inspectorate and to the so-called 'principle of proportionality'. The latter means that the supervision of schools starts from the results of school self-evaluations, provided they meet the requirements set by the Inspectorate (Inspectie van het Onderwijs, 2002; Ministerie van Onderwijs, Cultuur & Wetenschappen, 2000–2002; Renkema, 2002).

More than 70 Dutch different instruments for school self-evaluation are available now (The Standing International Conference of Central & General Inspectorates of Education, 2003). However, studies pointed at the presence of technical weaknesses in these instruments, such as a lack of attention to their reliability and validity (Cremers-van Wees, Rekveld, Brandsma, & Bosker,

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doi:10.1016/j.stueduc.2009.12.001

1996; Hendriks, 2000). ZEBO (the acronym stands for self-evaluation in primary schools) has been developed as a response to this situation.

The school self-evaluation instrument ZEBO

ZEBO is an instrument for measuring school process indicators (reflecting processes at classroom and at school level), with school effectiveness research as its conceptual background. Thirteen variables that school effectiveness research had shown to be associated with relatively high value-added achievement were selected for the development of ZEBO (Scheerens & Bosker, 1997).

ZEBO is made up of four questionnaires: one for school managers, one for teachers, one for students in grade 3, and one for students in grades 4–8. ZEBO measures school process variables by questioning different groups of respondents in the same school on the same topics. Students are asked to judge the nature of instruction in their class regarding the extent of: structured education, adaptive education, classroom climate and learning time. School leaders are asked to judge the features of the school in terms of co-operation and consultation, student care, the working environment, educational leadership, staff development, and agreement on school goals. Teachers judge instruction in the classroom, as well as the educational organisation at the school level (Hendriks, 2001; Hendriks & Bosker, 2003).

The comparison of the school and classroom scores of a particular school to the national averages is an important feature of the ZEBO feedback, which includes norm-referenced tables (in percentiles) of the actual performance of a representative reference group of Dutch primary schools. Furthermore, school reports compare teachers' scores with those of the school management, and classroom reports compare teachers' scores with those of students (Hendriks, 2001; Hendriks & Bosker, 2003).

Research question

ZEBO provides schools with performance feedback. The consistent positive effect of evaluating student achievement on educational effectiveness (Scheerens & Bosker, 1997), and the central place of the feedback mechanism in control theory and other scientific disciplines point to the important role of feedback (Coe, 1998). Kluger and DeNisi (1996), in their meta-analysis of about 100 years of feedback research, did indeed find that the effects of varying feedback interventions substantially improved overall performance (p. 40). However, they also found that feedback effects were detrimental in one third of all cases. Therefore, it is worthwhile to gain insight into the conditions under which feedback works. One reason for the occurrence of no effect of performance feedback is that the feedback is not always (fully) made use of (Coe & Visscher, 2002b; Weiss, 1998). New valuable information often proves to be an insufficient precondition for triggering improvement-oriented behaviour (Coe & Visscher, 2002b; Weiss, 1998). Weiss (1998) based on all her research on the utilisation of evaluation results points to possible reasons for this: e.g. use can break down because the target users may not receive the evaluation results, not understand or believe them, not know what to do about them, or not have the authority to use them. Motivation and commitment to improve are required for utilisation, and in many cases resources and social support too.

This means that the introduction of school self-evaluation systems does not necessarily lead to the development of actions to improve school performance.

Coe and Visscher (2002b) conclude that, although the justifications for using School Performance Feedback Systems (SPFSs), such as ZEBO, are plausible and thousands of schools have voluntarily implemented them, the rational response to our ignorance of the conditions promoting effective SPFS use (Van Petegem & Vanhoof, 2004) must be to conduct solid evaluations. Schildkamp (2007) conducted a longitudinal study into the use of the Dutch school self-evaluation instrument ZEBO. The primary goal of this article is to provide insight into the factors that are decisive for the use of the ZEBO self-evaluation results. In other words, our central research question is:

Which factors influence the use of self-evaluation results obtained from the Dutch school self-evaluation instrument ZEBO?

Theoretical framework

Visscher (2002) has developed a theoretical framework for studying the use of SPFSs, such as ZEBO. Based on a review of the literature on educational innovation he identifies three *groups* of factors that are supposed to influence the use of a SPFS:

- the implementation process features,
- the SPFS characteristics,
- the school organisational characteristics.

Visscher's general theoretical framework was contextualized to the specific nature of ZEBO and the way in which it was introduced into participating schools (Fig. 1). Block D in Fig. 1 includes the various aspects of the use of ZEBO like the degree to which the indicators on school and classroom processes are studied and discussed within the school team, and the number of school improvement measures that is taken as a result of that.

Blocks A, B, and C respectively include those factors expected to influence ZEBO use like the magnitude of training ZEBO users, the extent to which principals encourage ZEBO use among teachers (both factors from Block B), the attitude of target users towards ZEBO, the time and other resources for working with ZEBO (Block C), the relevance of ZEBO output, and the ease of entering ZEBO data (Block A).

Method

Sample

A purposive sample of primary schools was drawn. All 312 schools in the district of the school advisory service "Expertis" were asked to participate in the study. Seventy-nine Dutch primary schools were willing to participate. The sample was representative for the Netherlands regarding the composition of the pupil population of schools ($F = 0.26$, $p = 0.61$) in terms of the social economic status of the parents of these pupils, however, as the schools in the sample on overage had a smaller size, the sample was not representative for school size ($F = 10.61$, $p = 0.01$).

Data collection

Various instruments were used to collect data in this study:

- The school self-evaluation instrument ZEBO.
- The teacher and principal Evaluation of ZEBO Questionnaire.
- Interviews with teachers and principals about the use of ZEBO.

The ZEBO instrument

Schools used the computerized version of ZEBO for the first time in 2003, for the second time in 2004, and in 2006 it was used for the last time for this study; schools were, however, free to use ZEBO more often if they wished to do so. Table 1 presents the number of schools which used ZEBO in each phase of the study. Twelve schools used ZEBO once (six schools used ZEBO in 2003 for the first