

The fit between school board control and behaviour of middle managers, team leaders and teachers in Dutch colleges for vocational education and training

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Abstract

The inspectorate's judgements about a school's educational quality in the Netherlands are to a large extent based on sophisticated desk research, risk analyses and analyses of the school's self-evaluation reports. This relatively distant mode of inspecting schools relies on rational ideas about organizational management and control while aspects that might hinder boards from effective steering and influencing processes in schools are almost neglected. By comparing two schools that have boards that are considered to be in control and two schools that have boards that are not in control, we examine whether and how an inspectorate's judgement of being in control fits the behaviour of teachers, team leaders and middle managers. This study among teachers, team leaders, middle managers and quality assurance managers shows that the extent of board control only partly fits the behaviour of teachers, team leaders and middle managers.

Keywords

Performance measurement, inspection methods, organizational culture, board control

Introduction

Over the last decade, accountability, evaluation and inspection practices have grown in the field of education. In the Netherlands schools have to write accounting documents such as self-evaluation documents and annual reports and have become subject to more sophisticated inspection methods such as risk analyses (Ehren and Honingh, 2012; McNamara and O'Hara, 2008). The basic principle underlying current working methods of the Dutch Inspectorate of Education reveals a rather rational top-down orientation of school organizations. In their working method it is assumed

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that if the school board demonstrates that it is in control – even if risks are identified – the school board will be able to find solutions to problems and to foster school improvement (Inspectorate of Education, 2011; Janssens and De Wolf, 2009). This rational approach seems to ignore the difficulties boards have to affect and manage educational quality. Moreover, aspects of organizational behaviour, bottom-up processes, the receipt and integration of information, social trust and ties within the school organization are given little attention despite being crucial in improving school performances (Petit et al., 2012; Spillane and Seashore Louis, 2002). Reflecting on Dutch schools in general, Hooge (2013) states that it is extremely difficult – if not impossible – to manage and control educational quality. Taking this idea as a starting point, we discuss whether a rational top-down orientation – like the one the Inspectorate of Education applies in its working methods – leads to judgements that fit the day-to-day activities of teachers, managers, middle managers and board members to guarantee and enhance the educational quality. To answer this question, we will analyse whether the Inspectorate of Education's judgement that a board is in control goes hand in hand with the kind of behaviour that is expected of teachers, team leaders and middle managers to enhance the educational quality.

The Dutch vocational education and training sector

In the Netherlands, vocational education and training (VET) is organized within 68 VET colleges, in Dutch regional training centres (ROCs, *Regionaal Opleidingen Centrum*). On average, these colleges¹ have 7,704 students, some colleges having as many as 20,000 students or even more (Thomsen et al., 2014). These colleges offer study programs at four qualification levels (levels 2–4/5 of the European Qualification Framework; European Commission, 2008) for youngsters who have completed the first compulsory cycle of secondary education. At each qualification level, students are able to choose whether they learn in the workplace or in school. Various combinations are possible with a minimum of either one-day learning in school or one-day learning in the workplace. Graduates of courses at the highest qualification level are allowed to enter the bachelor programs in higher professional education (e.g. De Bruijn, 2012). There are currently 530,000 students in the VET sector, 485,000 of them taking part in regular VET courses (MBO council, 2016). The vocational colleges offer programs in four sectors: technology; commerce/administration; services/health; and agriculture. The quality of the educational programs provided and the final exams are judged by the inspectorate as part of the risk analyses (see the next section for a further explanation of the inspectorate's working methods).

The Dutch Vocational Education Act distinguishes three aims of VET (Adult and Vocational Education Act, 1995: Article 1.2.1). The first one is to meet labour market demands. As such it is essential to equip students with the theoretical knowledge and practical skills to fulfil the requirements of their occupation. A second aim of VET is to contribute to improving the level of the national educational performances. Governments increasingly regard education (VET) as one of the determinants to position and benchmark their countries. A third aim ascribed to VET is to prepare students for society. As such colleges have to incorporate civic education into their curriculum. These three aims focus on the outcomes of VET, but they also imply certain educational processes that lead to these outcomes. Vocational colleges are partially obliged to implement certain educational processes, but do have a certain degree of autonomy to organize and design their curricula. In VET colleges, and in the larger ones in particular, leadership is distributed. VET colleges usually have three management layers: supervisors or middle managers (first level), who usually manage between one and four management teacher teams; location directors or sector

directors (middle level), who either manage one of the locations or are responsible for a branch of VET; and the colleges' director (top level) (Thomsen et al., 2014).

The VET supervision framework: working methods and assumptions

The Dutch government encourages inspectorates to apply methods that are considered the more cost-efficient, such as risk analysis and risk calculation (e.g. Black and Baldwin, 2010; De Wolf, 2007). In particular, risk-based school inspections are expected to increase effectiveness of school inspections by identifying potentially low-performing schools and increasing inspection activities in these schools (and fewer inspection activities in well-performing schools) (Inspectorate of Education, 2010b). In 2012 the Inspectorate of Education introduced a new Supervision Framework for the VET sector. Crucial elements in this Supervision Framework are *activating institutions* and *proportionate* inspection. Institutions are activated and stimulated to take responsibility for the quality of their education, examinations, self-evaluations and operational management. Consequently, the role of the Inspectorate of Education has become more complementary to the control mechanisms and processes the school board is required to have in place to monitor and improve the education in their schools (e.g. Janssens and De Wolf, 2009). In its turn the Inspectorate of Education rewards the institutions whose quality and quality assurance procedures are good by reducing the inspection burden. At this point of time, the Inspectorate of Education monitors the key aspects annually and carries out a triennial institutional analysis in the VET sector (Inspectorate of Education, 2011). The 'on paper' annual monitoring (the risk analysis) is meant to detect possible risks from a distance using BRON data (data set of all Dutch students in secondary education), the accounting given in the integrated annual report and specific signals. The second element of the so-called first order supervision is an institutional analysis. Every three years, a detailed analysis is undertaken on-site at each institution, aimed at answering two key questions:

1. *What are the results of the VET institution based on certain indicators (the output, the satisfaction of students, staff and employees, the stability of the organization and management, the quality of the education provided and exams, the financial continuity, efficiency and legality), do these indicators show possible risks for education quality and financial continuity, and if so, where do these risks lie?*
2. *What is the state of affairs of the quality assurance of the institution?*

The answer to both questions is the basis for a conclusion about the state of the institution, which the inspectorate sets down in a report. Subsequently, the following question is answered: What follow-up actions are considered desirable and who should take these actions? The inspectorate discusses the report and the follow-up actions considered desirable with the executive VET board in an administrative meeting (Inspectorate of Education, 2011).

It is important to note that in these risks analyses much importance is attached to the self-evaluation and the accountability data of the institutions and the desk research carried out by the Inspectorate of Education. With regard to the second-order supervision it is important to bear in mind that it is only implemented at institutions at which risks are seen and at which quality assurance is insufficiently developed. Whether or not the Inspectorate of Education itself assesses the quality of a program in the second-order supervision depends on the risks observed and to a large degree on the impetus such an assessment could add to improving the

quality as well as the development of quality assurance. This may differ per institution component. This means that the Inspectorate of Education does not always itself perform an assessment as a matter of course.

If an institution has serious weaknesses in its programs on several fronts and/or for a longer time, the Inspectorate of Education will intensify the supervision of the entire institution alongside the already on-going intensive supervision of programs. In special cases, the Inspectorate of Education may reprimand the institution to task regarding the functioning of its internal supervision.

A basic assumption underlying the inspection framework is: the more the institution is in control according to the first-order supervision, the more distance the Inspectorate of Education can take. The Inspectorate of Education speaks in such cases about 'earned trust'. This approach is rooted in the idea that if the school board shows that it is 'in control', the school will be able to find solutions for problems and to foster school improvement (Inspectorate of Education, 2010a; Janssens and De Wolf, 2009).

Consequently, the inspection framework assumes a linkage between board control and school performance, although scientific evidence is still lacking (Commissie Oudeman, 2010; Hooge et al., 2006; Inspectorate of Education, 2010c; Van Esch and Teelken, 2008). Over the last decade school boards and their effectiveness have been given increasingly more attention. Unfortunately, this has not offered straightforward models, but rather complex and often indirect models, that show – at least in primary education – that there is some evidence that boards have an indirect influence on the improvement of schools through their impact on and provision of leadership in schools, and through changes in the structure and culture of schools (Land, 2002) Saatcioglu et al. (2011) address the multi-layered nature of school organizations and illustrate how school boards' policies, decisions and activities 'trickle down' to the classroom level, ultimately impacting on the interaction between teachers and students. At this point of time, it seems that implications of the multi-layered nature of the organizational structure of schools in the VET sector and the probably indirect nature of effects of the boards are not taken into account in the Inspectorate of Education's framework. In a complex multi-layered organization, the direction and quality of knowledge transfer, the receipt and integration of information, social trust and ties within the school organization are essential. Studies in schools for primary and secondary education show, however, that these factors are crucial in improving school performances (Daly and Finnigan, 2010; Hofman et al., 2004; Petit et al., 2012; Spillane and Seashore Louis, 2002). Until we have solid empirical knowledge about the direct or indirect effects of school boards on educational quality, it is important to be careful when assuming a link between boards and educational quality, performance or improvements.

Such a top-down rationale, as can be found in the Inspectorate of Education's framework, raises the question whether the Inspectorate of Education's judgement about being in control fits the day-to-day activities of teachers, managers, middle managers and board members to guarantee and enhance the educational quality. In other words, does the Inspectorate of Education perceive the behaviour/care that is given within the school organization to enhance and guarantee educational quality? To answer this question, we will analyse whether the inspection judgements about being in control go hand in hand with the responsible behaviour of teachers, team leaders and middle managers to enhance the educational quality. From a theoretical angle this question addresses the issue as to whether formal quality assurance procedures and the measurements of the inspectorate accurately reflect behaviour.

Theory

To answer our research question we need to elaborate on theoretic assumptions and notions underlying the work of inspectorates and the frameworks they use, the roots of performance measurement and various approaches of control via performance measurements.

Underlying the working methods of inspectorates, we find notions about control and measuring performances in the public sector. Basically, the work of the Inspectorate of Education builds upon the idea that indicators are proxies as they represent the real world. Often, proponents tend to consider the results of performance measurements as a true representation of the world (Dambrin and Robson, 2011). However, there is also criticism regarding the value of performance measurement and the opportunity it affords to give an impression of the real world and the dynamics it causes (Andrews et al., 2010; Dambrin and Robson, 2011). There are several well-known perverse effects of performance measurement, for example: (1) an increase in monitoring costs; (2) dysfunctional effects such as ossification, a lack of innovation, tunnel vision and suboptimal reporting; and (3) symbolic behaviour such as ritualism (Bevan and Hood, 2006; Braithwaite et al., 2007; De Bruijn, 2002; De Wolf and Janssen, 2007; Dubnick and Frederickson, 2010; Power, 1997; Speklé and Verbeeten, 2014; Van Thiel and Leeuw, 2002). These perverse effects ultimately lead to a performance paradox, i.e. a weak correlation between performance indicators and performance itself (Meyer and Gupta, 1994; Van Thiel and Leeuw, 2002).

Two types of control

As to avoiding perverse effects, Eisenhardt (1985) states that a fit is necessary between the used control mechanisms and the organization's primary tasks (core business). She makes a distinction between two types of control mechanisms: external measure-based control and internal value-based control (Eisenhardt, 1985; Vosselman and Van der Meer-Kooistra, 2009). External measure-based control includes formal rules, procedures and policies to safeguard, monitor and reward desirable performances. Due to the centrality of safeguarding policies, the indicators and control mechanisms are designed and developed outside of the organization that is subjected to inspection. In that sense, external measure-based control aims to make the behaviour of the agent predictable and transparent (Andrews et al., 2010; Vosselman and Van der Meer-Kooistra, 2009). There are a couple of requirements that have to be met to make this approach successful: a high level of task programmability and a high measurability of outcomes, little uncertainty and low costs of outcome measurement (Speklé and Verbeeten (2014) use the term 'contractibility' for these conditions).

The second type of control mechanism that Eisenhardt (1985) describes is internal value-based control. This approach stresses the importance of encouraging desirable behaviour and outcome by imposing and explicating organizational goals, values, norms and culture to stimulate organization members to internalize these notions. As such, this type of control does not rely on accounting measures and accounting information (Vosselman and Van der Meer-Kooistra, 2009). This type of control fits into a context that is characterized by a low task programmability, low measurability of outcomes, a high level of uncertainty and high costs of outcome measurement. This implies that it is crucial to look at the work floor to get an impression of the behaviour of employees and whether there is a shared clear goal.

To sum up, whether the first or second approach is more promising depends on the fit between the used control mechanisms and the organization's primary tasks. Speklé and Verbeeten (2014) add to this that the purpose of control should fit the applied control mechanisms. Control systems

can serve a variety of purposes such as measuring performance, influencing behaviour, learning and improvement, and accounting and explaining (Henri, 2006; Speklé and Verbeeten, 2014; Taylor, 2014; Van Dooren et al., 2010). However, influenced by New Public Management thinking, the variety of applied control in the public sector is rather limited and can be characterized as external measure-based control in which target setting, performance evaluation and incentive provision prevail (Speklé and Verbeeten, 2014). This means that the fit between control mechanisms and the organization's primary task and the actual goal of control seems often to be neglected when developing control mechanisms.

Theoretical fit between type of control and primary tasks in the VET sector?

As evaluating the output of students is at the very heart of the working methods of the Inspectorate of Education, we observe a similar narrow focus on external measure-based control in the VET sector. From a theoretic angle it is possible to answer the question whether such an information-based approach can be considered a successful strategy for schools in the VET sector by focusing on the *primary processes* within these schools and the actual purpose of the control. Two criteria can be identified to consider the fit between the control mechanism and the primary task: the first one is knowledge of the transformation process or task programmability and the second one is the ability to measure outcomes (Eisenhardt, 1985: 135).

In education, and in the VET sector in particular, organizations do not produce their services themselves. Teachers cannot produce education without the efforts of their pupils (or students) as education is a relational good (see Honingh, 2008). As such, education processes require inputs from the teacher (traditional producer) and pupils (traditional consumer) (e.g. Honingh, 2008; Porter, 2012). There will be no learning without the active, willing participation by the pupil. Moreover, the 'products' are intangible. As a consequence, students affect output and outcome, and performance is difficult to measure by means of 'hard' measures (Fountain, 2001; Van Thiel and Leeuw, 2002). To complicate matters further, it is not only the board's capacity and pupils' capacities and willingness that affect educational quality, it also depends on the organizational structure of schools. In that respect, Saatcioglu et al. (2011) address the multi-layered nature of school organizations. They illustrate how school boards' policies, decisions and activities 'trickle down' to the classroom level, ultimately impacting on the interaction between teachers and students. When looking at the intra-school organization structure of colleges for VET it becomes clear that there are several subsystems within the organization (e.g. the subsystem of learning, the supporting system and management system) (e.g. Weick, 1976; see also Hanson, 2001). However, over the last one and a half decades the position of (middle) managers in VET colleges has strengthened, and responsibilities for performances and managerial issues are widespread throughout the subsystems within schools. Most teachers have, in addition to their teaching obligations, certain administrative tasks such as team coordination, or coordination of students' work placements (e.g. Hermanussen and Thomsen, 2011). Because of this wider distribution of responsibilities and the explicit responsibility teams have for their performances it is important to reconsider the strict demarcation between managerial responsibilities and classroom practices. The distribution of responsibilities does not necessarily mean that teams operate in similar ways. On the contrary, teams are encouraged to take sector, team and pupils' circumstances into account in their teaching and team coordination to become successful. Therefore, we also assume that teams will use their discretionary room for manoeuvre to decide whether and how they will act in response to board decisions, requests for information and the performance information they are

provided with from the boards. All in all, the above suggests a greater variety between teams within schools and an increased need for bottom-up processes to guarantee that boards remain well informed.

Analysing the primary process and the intra-school organization structure and management within the VET sector, it becomes clear that knowledge of the transformation process is limited and task programmability is low. The same goes for the ability to measure outcomes. In terms of Speklé and Verbeeten (2014), the degree of contractibility is low. Therefore, we hypothesize that the fit between the inspection methods that are currently applied in VET schools is suboptimal. To test this hypothesis, it is first crucial to address the issue of behaviour of teachers, middle managers and quality assurance managers. This is because behaviour will indicate whether teachers and middle managers behave according to board control and carry out their tasks to conform to top-down steering.

Measuring behaviour

To determine the informal processes and elements of school culture that influence the motivation, loyalty, integrity, inspiration and norms and values of professionals, we will use the concepts of *social capital* (Leeuw, 2002; Portes, 1998) and *ethical organizational culture* (Kaptein, 2007). *Social capital* embodies the idea that involvement and participation in groups can have positive consequences for the individual and the community (Portes, 1998). As such, social capital can be seen as a starting point for achieving goals. This idea dates back to Durkheim and Marx, although the first definition was only recently produced by Bourdieu in 1980. It is important to note here that social capital can be broken down into two distinctive elements: first, the social relation itself that offers access to resources; and second, the amount and quality of those resources. These resources have an intangible character and are inherent in the structure of the relations. Analysing social capital is grounded on relationships between actors or individual actors and a group, and focuses on the potential benefit because of insertion into networks of broader social structures. In order to measure social capital, one needs to map the networks (relationships) in an organization to: (1) identify who communicates with whom; and (2) determine the quality and potential benefits of these interactions (Leeuw, 2002). In this study, which focuses on measuring informal processes that might be related to aspects of educational quality or that can be seen as ways to contribute to enhancing the educational quality, it is firstly important to know who starts a conversation with whom about topics that are related to educational quality, and secondly, it is important to know the topics of these conversations. Analysing the patterns and topics that are discussed within schools and teams enables us to gain an insight into the differences that may be present in schools to contribute to educational quality and their relatedness to the extent of board control. In other words, insight into these patterns will offer information about the extent to which a (formal) top-down structure does or does not exist.

Culture analysis aims to analyse to what extent views, assumptions and mental maps of managers about the organization's aims and direction, the context within which these have to be implemented and the strategies that have to be adopted are aligned with the views and expectations of professionals in the organization (Leeuw, 2002). A specific framework to conduct such a cultural analysis is the model of *ethical organization culture* described by Kaptein (2007). This model consists of seven dimensions (Table 1).

The first two dimensions relate to the self-regulating capacity of the organization (clarity and congruency of supervisors and management) (Kaptein, 2007). The following two virtues refer to

Table 1. Seven dimensions of ethical organizational culture.

| | |
|--|---|
| Clarity | Clarity of normative expectation regarding conduct of employees/professionals |
| Congruency of supervisors and management | The moral requirement that supervisors and managers should visibly act in accordance with normative expectations |
| Feasibility | The extent to which the organization creates conditions which enable employees to comply with normative expectations |
| Supportability | The extent to which the organization creates support among employees to meet normative expectations |
| Transparency | The degree to which employee conduct and its consequences are perceptible to those who can act upon it, i.e. colleagues, supervisor, subordinates and the employee(s) concerned |
| Discussability | The opportunity employees have to raise and discuss ethical issues |
| Sanctionability | The likelihood of employees being punished for behaving unethically and rewarded for behaving ethically |

Source: Kaptein (2007) and Lückérath-Rovers (2011).

Table 2. Possible results.

| | Inspectorate of Education's judgement | Behaviour in schools |
|---|---------------------------------------|----------------------|
| 1 | + | - |
| 2 | + | + |
| 3 | - | - |
| 4 | - | + |

the self-providing capacity of the organization (feasibility and supportability), while the last three dimensions are concerned with the self-correcting or self-cleansing capacity of the organization (transparency, discussability and sanctionability) (Kaptein, 2007). This means that a culture is ethical when expectations regarding the conduct of employees are clear, the actions of the top are in accordance with these norms and the norms are feasible. In addition, employees are involved in and committed to the norms, which is achieved by making them perceptible and discussable. Finally, undesired behaviour does have consequences (Lückérath-Rovers, 2011).

All in all, the question in this study is whether the judgement of the Inspectorate of Education keeps pace with the school's social capital and the seven dimensions of ethical organizational culture within schools. From a theoretical point of view there are at least four scenarios possible (see Table 2).

Method

To study whether the Inspectorate of Education's judgement and the behaviour of personnel go hand in hand, we examine whether school boards that demonstrate that they are in control according to the Inspectorate of Education have an ethical organizational culture and show that they benefit from social interactions among organizational members. To that end, we conducted a comparative case study of four ROCs, comparing two schools that are in control according to the

Table 3. Scales and reliability.

| Scale | Number of items | Cronbach's alpha | Eigen value | Source |
|---|-----------------|------------------|-------------|----------------|
| Clarity | 6 | – | – | Kaptein (2007) |
| Congruency of board members | 4 | .887 | 74.734 | Kaptein (2007) |
| Congruency of the middle management | 6 | .896 | 68.095 | Kaptein (2007) |
| Congruency of the team leader | 4 | .850 | 71.526 | Kaptein (2007) |
| Feasibility | 2 | .859 | 87.670 | Kaptein (2007) |
| Supportability (team) | 2 | .756 | 80.412 | Honingh (2008) |
| Supportability (individual) | 3 | .813 | 73.305 | Honingh (2008) |
| Transparency | 3 | .755 | 67.507 | Kaptein (2007) |
| Discussability | 6 | .811 | 52.295 | Kaptein (2007) |
| Sanctionability | 4 | .764 | 58.731 | Kaptein (2007) |
| Trust | 7 | .877 | 58.325 | Honingh (2008) |
| School climate (team) | 6 | .851 | 72.934 | Honingh (2008) |
| School climate (perception of the management) | 2 | .627 | 57.693 | Honingh (2008) |
| Development and improvement | 8 | .881 | 55.310 | Honingh (2008) |

Inspectorate of Education and two that are not in control. Within the four ROCs we collected data at multiple levels (middle management, team leader and teacher) using quantitative methods.

A survey was developed for middle managers, team leaders and teachers. The questionnaire was specifically developed for this study, partly using existing and validated scales and items about the organization's ethical culture (Kaptein, 2007), school climate and organizational behaviour of schools (Honingh, 2008). Some of the items had to be adapted to suit our purposes. The questionnaire consisted of 14 scales to measure ethical organization culture, school climate and development (see Table 3).

The respondents were asked to indicate to what extent they agreed with the propositions in the questionnaire. The questionnaire consisted of 13 subscales, having a Cronbach's alpha higher than .755, with the exception that the scale 'school climate perception of the management team' has a Cronbach's alpha of .627. The content of the items in this scale is, however, of great importance. For that reason, we decided to include this scale in our analysis. Principal components analysis of the scale scores confirmed that all these scales cover one dimension. The first component in these analyses explain at least 52% of the variance (see Table 3).

Moreover, we included two questions in the survey to measure the quality and structure of social relations between teachers, team managers, middle managers, quality assurance managers and board members (a second measure of behaviour in schools). The responses to these questions were analysed using Social Network Analysis to visualize the structure and quality of social relations (Scott, 2000; Wasserman and Faust, 1994) between boards, quality assurance managers, middle managers and teachers. These relations indicate whether care for educational quality and school improvement is firmly embedded in the organization and whether a top-down or bottom-up structure dominates. In addition, we formulated two questions to examine whether teachers, team managers, middle managers, quality assurance managers or board members take the initiative for educational innovations and changes, and who makes the decisions regarding specific topics.

To enhance the internal validity of this study, member checks have been organized in all of the four institutions. Board members, quality assurance managers, middle managers, team leaders and

Table 4. School and cases involved in this study.

| | Hard technology | Administration and ICT | Services, hotel and catering, tourism and nutrition |
|---------------------------|-----------------|------------------------|---|
| School A (in control) | 0 | 0 | 1 |
| School B (in control) | 0 | 0 | 0 |
| School C (not in control) | 2 | 10 | 0 |
| School D (not in control) | 2 | 0 | 2 |

Table 5. Number of teachers per school and sector.

| | Hard technology | Administration and ICT | Services, hotel and catering, tourism and nutrition | Total |
|---------------------------|-----------------|------------------------|---|-------|
| School A (in control) | 5 | 7 | 10 | 22 |
| School B (in control) | 13 | 16 | 5 | 34 |
| School C (not in control) | 12 | 10 | 8 | 30 |
| School D (not in control) | 8 | 4 | 14 | 26 |

teachers were invited to participate in a meeting to reflect on the outcomes, interpretations and conclusions of our quantitative study.

Sample

Based on reports of the Inspectorate of Education about the extent to which school boards are in control, ROCs were approached to participate in this study. The website of the Inspectorate of Education gives an overview of educational programs of unsatisfactory quality. As a starting point we selected three branches that have the highest prevalence of unsatisfactory educational programs: (1) hard technology; (2) administration and ICT; and (3) services, hotel and catering, tourism and nutrition (3). A second step was to identify schools with the largest and the smallest number of unsatisfactory educational programs in these three branches/sectors. Table 4 presents the schools that are involved in the study. The number of unsatisfactory programs in this branch is indicated in the table's cells. The table reflects that Schools B and A are in control according to the Inspectorate of Education's assessment.

In response to our proposal of participation in our study, all middle managers and team leaders were willing to complete the questionnaire. Each team is represented by at least four teachers (see Table 5). In total, 112 teachers, 12 team leaders and 12 middle managers are involved in this study.

Results

This study aims to examine behaviour throughout the schools on the 13 dimensions of ethical organization culture, school climate and development. Table 6 presents the mean scores for all of the four schools on the 13 scales. The scores of the sectors have been aggregated to school level after controlling for significant difference between sectors within the schools. We only noticed significant differences within the school in School A (in control) and School D (not in control). In

Table 6. Comparison between schools.

| Scenarios | School A N = 28 In control | | School B N = 40 In control | | School C N = 36 Not in control | | School D N = 32 Not in control | | Effect sizes |
|---|----------------------------------|------|----------------------------------|------|--------------------------------------|------|--------------------------------------|------|--------------|
| | M | SD | M | SD | M | SD | M | SD | |
| | Congruency of board members | 3.23 | 1.07 | 2.80 | 0.90 | 3.27 | 1.01 | 3.15 | |
| Congruency of the middle management | 3.54 | 0.92 | 3.04 | 0.72 | 3.25 | 0.94 | 2.92 | 1.06 | |
| Congruency of the team leader | 3.88 | 0.81 | 3.97 | 0.71 | 3.58* | 1.00 | 4.26* | 0.62 | 0.09 |
| Feasibility | 3.86 | 0.98 | 3.50 | 0.74 | 3.39 | 1.12 | 3.48 | 0.99 | |
| Supportability (team) | 3.37 | 1.17 | 3.28 | 0.55 | 3.03* | 0.90 | 3.67* | 0.92 | 0.07 |
| Supportability (individual) | 4.37 | 0.57 | 3.76 | 0.91 | 3.84 | 1.03 | 3.73 | 1.10 | |
| Transparency | 3.70 | 1.08 | 3.80 | 0.48 | 3.32* | 0.87 | 4.07* | 0.71 | 0.11 |
| Discussability | 4.06 | 0.72 | 3.91 | 0.49 | 3.59* | 0.92 | 4.11* | 0.70 | 0.07 |
| Sanctionability | 3.72 | 0.93 | 3.70 | 0.57 | 3.67 | 0.84 | 3.90 | 0.80 | |
| Trust | 3.82* | 0.96 | 3.84* | 0.49 | 3.30* | 0.85 | 4.16* | 0.61 | 0.15 |
| School climate (team) | 3.75* | 0.85 | 3.60 | 0.59 | 3.26* | 0.63 | 3.80* | 0.60 | 0.09 |
| School climate (perception of the management) | 3.35 | 0.73 | 2.88 | 0.77 | 3.25 | 0.92 | 3.19 | 0.87 | |
| Development and improvement | 3.78 | 0.94 | 3.63 | 0.63 | 3.46 | 0.89 | 3.81 | 0.51 | |

One-way ANOVA, *significant $p < .05$; the scores in italics indicate the highest score on a scale. The calculated effect sizes for between-group ANOVAs are medium (> 0.059) and large (> 0.138).

School A, the services sectors, hotel and catering, and tourism and nutrition systematically report higher scores than those reported within the other two sectors on all scales except for clarity about educational quality. In School D, the sectors administration and ICT have a significantly higher score for trust and school climate (team). The sectors in both Schools A and D that report higher scores are judged by the inspectorate as not having weak educational programs.

The significant differences between schools are indicated by an asterisk. Taking a closer look at the scores of schools that are in control and contrasting these scores with those that are not, we notice that the pattern of scores does not correlate with the labels ‘in control’ and ‘not in control’ assigned by the Inspectorate of Education. Table 6 shows a mixed picture. Except for School B (in control) each of the schools turn out to have the highest score on one of the scales. Schools D and A respectively score 7 and 4 times the highest score on a scale. Both schools have significantly higher scores on trust and school climate (team). Moreover, School D also has a significantly higher score on congruency of the team leader, supportability (team), transparency and discussability. All these scores on behaviour (ethical organization culture, school climate and development) reflect that Schools C and A match the judgement of the Inspectorate of Education, whereas this turns out not to be the case for Schools B and D.

To analyse the quality and structure of social relations in the schools we included a question in the survey about the frequency with which teachers, team leaders and middle managers start to communicate with each other, with the quality assurance manager or with board members about issues related to educational quality and teaching processes. The items in the questionnaire are clustered in six themes. The scores range from 0 to 4 and indicate how frequently they communicate (0 = never; 1 = annually; 2 = monthly; 3 = weekly; and 4 = daily). The results are shown in Tables 7 and 8.

Table 7. Teachers communicate about educational issues with colleagues, team leaders, middle managers, quality assurance managers and board members.

| | School | Teachers | Team leader | Middle manager | Quality assurance manager | Board member |
|--|--------|----------|-------------|----------------|---------------------------|--------------|
| Educational process | A | 2.98 | 2.02 | 0.14 | 0.58 | 0.00 |
| | B | 2.62 | 2.03 | 0.04 | 0.10 | 0.00 |
| | C | 2.80 | 2.21 | 0.08 | 0.14 | 0.04 |
| | D | 3.17 | 2.85 | 0.08 | 0.10 | 0.01 |
| Students' achievements | A | 3.36 | 1.86 | 0.05 | 0.64 | 0.00 |
| | B | 3.19 | 1.68 | 0.03 | 0.13 | 0.00 |
| | C | 3.43 | 2.37 | 0.03 | 0.17 | 0.00 |
| | D | 3.64 | 3.04 | 0.00 | 0.00 | 0.00 |
| Educational results | A | 2.91 | 1.82 | 0.18 | 0.32 | 0.00 |
| | B | 2.88 | 1.71 | 0.00 | 0.26 | 0.00 |
| | C | 2.83 | 2.07 | 0.24 | 0.17 | 0.00 |
| | D | 3.08 | 2.64 | 0.00 | 0.00 | 0.00 |
| Vision on educational quality | A | 2.36 | 1.95 | 0.50 | 0.68 | 0.00 |
| | B | 2.32 | 1.82 | 0.06 | 0.19 | 0.03 |
| | C | 2.27 | 1.90 | 0.18 | 0.36 | 0.03 |
| | D | 2.84 | 2.64 | 0.24 | 0.20 | 0.08 |
| Organizational culture and development | A | 2.02 | 1.73 | 0.32 | 0.55 | 0.00 |
| | B | 1.96 | 1.70 | 0.13 | 0.09 | 0.00 |
| | C | 2.18 | 1.79 | 0.17 | 0.09 | 0.11 |
| | D | 2.40 | 2.27 | 0.08 | 0.11 | 0.04 |
| Quality assurance | A | 2.38 | 1.95 | 0.38 | 0.67 | 0.05 |
| | B | 1.32 | 1.14 | 0.01 | 0.24 | 0.00 |
| | C | 1.86 | 1.65 | 0.17 | 0.47 | 0.07 |
| | D | 2.32 | 2.11 | 0.15 | 0.12 | 0.04 |

The presented teacher scores are average scores per school.

Here it is important to notice that each table has a different starting point. Table 7 presents the responses of teachers about the people they consult to discuss their thoughts and worries about educational issues. Table 8 mirrors this question. Teachers in Table 8 report who consults with them to talk about educational issues. In fact, Table 8 can be read as a table offering a better understanding of the impact colleagues, team leaders, middle managers and board members have on teachers. Only the conversations that made an impression on teachers or have led to a certain behaviour are reported. As such, this table also helps us to understand whether there is a top-down or bottom-up structure within the school.

Comparing the scores of teachers in Table 7, we notice minor differences between schools, except for the extent to which teachers discuss quality assurance with teachers in their own team. The teacher teams in Schools A and D discuss the quality assurance issues more frequently than their colleagues in Schools B and C. The frequency with which teachers in School D take initiative to discuss issues with their team leader concerning the educational process, student achievements and vision on educational quality is significantly higher than in Schools B, A and C. In addition, we observe that teachers in all schools tend to discuss educational issues more frequently with the quality assurance manager.

Analysing the results in Table 8, the overall impression is that teachers in school D report that their colleagues approach them more often than in Schools B, A and C on the topics of educational

Table 8. Colleagues and managers that consult teachers to discuss educational issues.

| | School | Teachers | Team leader | Middle manager | Quality assurance manager | Board member |
|--|--------|----------|-------------|----------------|---------------------------|--------------|
| Educational process | A | 2.74 | 1.68 | 0.11 | 0.30 | 0.01 |
| | B | 2.16 | 1.86 | 0.07 | 0.08 | 0.00 |
| | C | 2.88 | 1.88 | 0.03 | 0.16 | 0.02 |
| | D | 3.08 | 2.63 | 0.09 | 0.12 | 0.00 |
| Students' achievements | A | 3.23 | 1.91 | 0.09 | 0.36 | 0.05 |
| | B | 2.70 | 1.81 | 0.06 | 0.13 | 0.00 |
| | C | 3.28 | 2.14 | 0.00 | 0.18 | 0.00 |
| | D | 3.42 | 3.04 | 0.23 | 0.08 | 0.04 |
| Educational results | A | 2.14 | 1.64 | 0.23 | 0.23 | 0.00 |
| | B | 2.06 | 1.76 | 0.03 | 0.00 | 0.00 |
| | C | 2.77 | 2.03 | 0.10 | 0.14 | 0.00 |
| | D | 2.58 | 2.46 | 0.15 | 0.15 | 0.04 |
| Vision on educational quality | A | 1.73 | 1.68 | 0.41 | 0.59 | 0.09 |
| | B | 1.50 | 1.56 | 0.09 | 0.16 | 0.03 |
| | C | 2.20 | 1.80 | 0.21 | 0.28 | 0.03 |
| | D | 2.58 | 2.54 | 0.19 | 0.19 | 0.12 |
| Organizational culture and development | A | 1.80 | 1.70 | 0.38 | 0.41 | 0.03 |
| | B | 1.74 | 1.88 | 0.12 | 0.05 | 0.04 |
| | C | 2.11 | 1.70 | 0.18 | 0.17 | 0.10 |
| | D | 2.11 | 2.00 | 0.15 | 0.13 | 0.07 |
| Quality assurance | A | 1.97 | 1.83 | 0.18 | 0.58 | 0.06 |
| | B | 0.86 | 0.82 | 0.04 | 0.29 | 0.00 |
| | C | 2.00 | 1.69 | 0.09 | 0.52 | 0.07 |
| | D | 2.15 | 2.18 | 0.18 | 0.19 | 0.10 |

The presented teacher scores are average scores.

process, vision on educational quality and quality assurance. These teachers also report that their team leader discusses these topics and student achievements more frequently with them. This contrasts with School B, where teachers report that they are approached the least by teachers within their team or by their team leader.

To summarize, the results in Tables 7 and 8 show that the scores of School B turn out to be lower than those of the other schools; in comparison with School D, the differences are the largest. Moreover, the scores of School A on issues concerning quality assurance are worth mentioning. Not only are these discussed more frequently among teachers, but also with middle managers and the quality assurance manager. And, conversely, the team leader discusses this topic more often with the teachers compared to the other schools.

The network patterns that become apparent when combining the data of both Tables 7 and 8 reveal that School A has a rather solid network structure in which all actors are present and connected. The team leader can be identified as the central actor, linking all the other actors. Reflecting on the ties and direction of these ties we observe bottom-up processes as the team leaders and teachers initiate discussions about educational issues. A slightly different pattern appears while analysing the ties in School B. The central actors in this network are the middle managers, team leaders and quality assurance managers. As they take the initiative in discussing educational matters, a more top-down structure becomes apparent. School C has a rather dense

Table 9. Results.

| School | Inspectorate of Education's judgement | Culture scales | Social relations |
|--------|---------------------------------------|----------------|------------------|
| A | + | + | + |
| B | + | +/- | - |
| C | - | - | +/- |
| D | - | + | + |

network structure, but at the same time there is a low frequency of interaction between the actors compared to the other schools. As with School B, there is a top-down structure. The fourth school (School D) has a dense network structure in which actors regularly interact. The initiative to discuss educational matters is taken by all actors suggesting both top-down and bottom-up processes.

Summarizing the findings

Taking the scores on the scales of ethical organization culture, school climate and development also into account, we notice a consistent pattern in School D. Within this school there are more frequent discussions about educational issues and the scores on a number of measurement scales are relatively high in comparison to the other schools. A comparable and consistent picture appears when the scale scores and the scores in Tables 7 and 8 are brought together for School A. For Schools B and C, a less consistent profile appears. School B is seen to have some relatively positive as well as negative scores on the scales of ethical organization culture, school climate and development, and the scores presented in Tables 7 and 8 are relatively low. The scores in Tables 7 and 8 for School C were slightly more positive than for School B, but here the scale scores were often the lowest. Integrating these scores with the Inspectorate of Education's judgements, the following impression arises.

Table 9 shows that the judgements by the Inspectorate of Education are partly supported by both measurements of behaviour. Therefore, we conclude a false positive in the case of School B and a false negative for School D.

Discussion and conclusion

Before we discuss our findings, two limitations should be considered. The first limitation is that all the measures were obtained through self-reporting by teachers, team leaders and middle managers, common method variance therefore is a problem, as are social desirability effects. Although self-reported data are commonly used to measure the perception of individuals, it is important to remember that they may not reflect the actual behaviour of the respondents. Here it is relevant to mention once more that the judgement of the inspectorate relies heavily on self-reporting as well, but then it concerns self-reporting of the board. Basically, our question is whether perceptions on these different levels are shared. By posing this question we examine the strength of the linkage between views at board level and other levels in the multi-layered organizational structure of schools.

The second limitation concerns the sample size. Only four schools are included in this comparative case study. The sample is not numerically representative and the external validity is limited. However, due to the careful case selection, our cases cover schools that are judged

differently by the inspectorate. Our findings indicate different patterns in the schools that were examined and show the relevance of the question we addressed in this article. As such, the outcomes are valuable and warrant further investigation in more schools.

Having said all this, our results show a clear need to consider and reflect on assumptions underlying the inspection methods of the Dutch Inspectorate of Education, and the linkage between their judgement of board control and behaviour on the work floor. The idea that school boards that are in control are able to foster school improvement and find solutions to problems that might occur is one of the assumptions underlying the current working methods of the Inspectorate of Education. Whether the behaviour in schools fits the Inspectorate of Education's judgement is the central question we addressed in this paper. The analyses of our survey aiming to measure ethical organization culture, school climate, development and social relations reveal that the judgement of the Inspectorate of Education is supported by half of the four schools that were involved in our study.

These findings imply that middle managers, team leaders and teachers who report positively about the ethical organization culture, the school climate, and the frequency and quality of social relations do not necessarily work in a school with a board that is in control, and vice versa. As such, these findings raise questions about the manner in which the inspectorate judges school boards to be in control or not, and about the linkage between board control and the work floor. The data we collected provide a better understanding of the dynamics within sectors and schools and the extent to which teachers, team leaders and middle managers consider their organization to have an ethical culture. As such, these data provide information about aspects of the organizational culture that is crucial in improving school performances (Petit et al., 2012; Spillane and Seashore Louis, 2002).

Our analysis indicates that communication between teachers, team leaders and middle managers concerning educational issues is less static and top-down than assumed in the inspection framework. Teachers do take the initiative to discuss educational processes, student achievements and vision of education with managers and team leaders. This illustrates the fact that there are substantial bottom-up processes and initiatives that might contribute to school improvement. These bottom-up processes, which might be of great value, seem to remain unnoticed due to a rather top-down-oriented inspection method. Since we find a false negative and a false positive, we conclude that the behaviour that is expected in schools based on the inspectorate's judgement is not necessarily present, while ethical behaviour that is present is not captured by the working method.

Here it is important to say that we noticed during the member check that all four school boards are aware of the importance of organizational culture and have put a lot of effort into stimulating a transformation in school culture. They have tried to improve the organizational culture and strengthen the awareness of teachers to focus on educational quality. In particular, in School D teachers have been encouraged by the board and middle managers to take more responsibility and to bring issues concerning educational quality to the table. During the member check, the quality assurance manager of this school confirmed a culture transformation within the school over the last year. She reported that teachers are more willing to discuss issues they consider to be relevant to educational quality. The quality assurance manager even reported that board members visit school teams. It is remarkable that a comparable transformation was not reported and mentioned in the other schools, while the awareness at board level is the same.

From the theoretic approach presented in this paper about the assumed fit of inspection methods, we conclude that inspection methods based on external measure-based control do not seem to be fully applicable in VET schools due to low contractibility of the primary process. This type of control does not seem to reflect the real world and behaviour on the work floor in VET schools. As Speklé and Verbeeten (2014) state, drawing on an empirical study in the public sector, how well

the performance measurement fits is situation dependent. We assume that the same goes for inspection methods. As far as we are aware, there is a growing knowledge base regarding the use and effects of risk-based inspection and highly responsive regulation. Most of this research is, however, conducted in the industry (e.g. Ale, 2005; Black and Baldwin, 2010). So far, the educational field seems to be understudied, as we could only find reflections and policy evaluations related to the field, and hardly any empirical studies (e.g. De Wolf, 2007; Ehren and Honingh, 2012).

Because the extent to which the (performance) measurement fits is situation dependent there is a clear need for reflection on the working methods of the Inspectorate of Education. It could be worthwhile developing more adaptive systems to gather information, in order to mitigate the information asymmetry, and to develop inspection methods that are inspired by internal value-based control. We assume that such an inspection method would be better able to grasp the ethical organizational culture and the quality of social relations at all levels of the multi-layered structure of schools. Another issue in such reflection is the actual purpose of inspection, given the wider discussion of the position and tasks of inspectorates. It is known that learning processes give rise to a different dynamic in organizations than control does. Also in this respect, an internal value-based inspection method would probably have a better fit.

All in all, it might be the case that the presence of factual data leads to a false sense of control in schools for at least two reasons: boards lack a full understanding of the numbers, figures and underlying processes; and the scope of the used measurements is too limited to cover all that is being done on the work floor to enhance educational quality.

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Note

1. The formal term for schools offering vocational education and training is a VET college. We will use both the term 'school' and 'college' and the Dutch abbreviation ROC in the course of this article.

References

- Ale BJM (2005) Living with risk: A management question. *Reliability Engineering & System Safety* 90(2–3): 196–205.
- Andrews R, Boyne G, Moon MJ and Walker RM (2010) Assessing organizational performance: Exploring differences between international and external measures. *International Public Management Journal* 13(2): 105–129.
- Bevan G and Hood C (2006) What's measured is what matters: Targets and gaming in the English public health care system. *Public Administration* 84(3): 517–538.
- Black J and Baldwin R (2010) Really responsive risk-based regulation. *Law & Policy* 32(2): 181–213.

- Bourdieu P (1980) Le capital social. Notes provisoires. *Actes Rech Sci Soc* 31: 2–3.
- Braithwaite J, Makkai T and Braithwaite V (2007) *Regulating Aged Care: Ritualism and The New Pyramid*. Cheltenham, UK: Edward Elgar.
- Commissie Oudeman (2010) *Naar Meer Focus op het MBO!* Den Haag, The Netherlands: Ministerie van Onderwijs Cultuur en Wetenschap.
- Daly AJ and Finnigan KS (2010) A bridge between worlds: Understanding network structure to understand change strategy. *Journal of Educational Change* 11(2): 111–138.
- Dambrin C and Robson K (2011) Tracing performance in the pharmaceutical industry: Ambivalence, opacity and the performativity of flawed measures. *Accounting, Organizations and Society* 36(7): 428–455.
- De Bruijn E (2012) Teaching in innovative vocational education in the Netherlands. *Teachers and Teaching: Theory and Practice* 18(6): 637–653.
- De Bruijn H (2002) Performance measurement in the public sector: Strategies to cope with the risks of performance measurement. *International Journal of Public Sector Management* 15: 578–594.
- De Wolf I (2007) Risicoanalyse en risicomanagement bij toezichthouders. In: Leeuw FL, Kersenboom JS and Elte R (eds) *Turven, Tellen en Toetsen, Over Toezicht, Inspectie, Handhaving en Evaluatie en Hun Maatschappelijke Betekenis in Nederland*. Den Haag, The Netherlands: Boom Juridische uitgevers, pp.123–136.
- De Wolf IF and Janssen FJG (2007) Effects and side effects of inspection and accountability in education: An overview of empirical studies. *Oxford Review of Education* 33(3): 379–396.
- Dubnick MJ and Frederickson HG (2010) Accountable agents: Federal performance measurement and third-party government. *Journal of Public Administration Research and Theory* 20(1): 143–159.
- Ehren MCM and Honingh ME (2012) Risk-based school inspections in the Netherlands: A critical reflection on intended effects and causal mechanisms. *Studies in Educational Evaluation* 37(4): 239–248.
- Eisenhardt KM (1985) Control: Organizational and economic approaches. *Management Science* 31(2): 134–149.
- European Commission (2008) Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning [Official Journal C 111, 6.5.2008]. Available at: http://europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11104_en.htm (accessed 10 July 2013).
- Fountain JE (2001) Paradoxes of public sector service. *Governance* 14(1): 55–73.
- Hanson EM (2001) *Educational Administration and Organizational Behaviour*. Boston, MA : Allyn and Bacon.
- Henri JF (2006) Organizational culture and performance measurement systems. *Accounting, Organizations and Society* 31(1): 77–103.
- Hermanussen J and Thomsen M (2011) Werken in teams—Stand van zaken. In: Moerkamp T, Hermanussen J, Groenenberg R, et al. (eds) *Personeelsbeleid in Het Middelbaar Beroepsonderwijs*. Alphen aan den Rijn, The Netherlands: Kluwer, pp.51–77.
- Hofman RH, Hofman WHA, Gray JM and Daly P (2004) *Institutional Context of Education Systems in Europe. A Cross-Country Comparison of Quality and Equity*. Dordrecht/Boston/London: Kluwer Academic Publishers.
- Honingh ME (2008) Beroepsonderwijs tussen publiek en privaat; een studie naar opvattingen en gedrag van docenten en middenmanagers in bekostigde en niet-bekostigde onderwijsinstellingen in het middelbaar beroepsonderwijs. PhD Thesis, University of Amsterdam, The Netherlands.
- Hooge E (2013) Besturing van autonomie. Over de mythe van bestuurbare onderwijsorganisaties. Tilburg, The Netherlands: Universiteit van Tilburg (Oratie).
- Hooge EH, Nusink F and Van der Sluis M (2006) *Zicht op Intern Toezicht; Theorie en Praktijk van Raden van Toezicht in de BVE-Sector*. Amsterdam: MGK BVE.

- Inspectorate of Education (2010a) *Risicoanalyse; Risico's in Beeld [Risk-Based School Inspections: Identifying Risks]*. Utrecht, The Netherlands: Inspectie van het Onderwijs.
- Inspectorate of Education (2010b) *Evaluatie Risicogestuurd Toezicht [Evaluation Risk-Based School Inspections]*. Utrecht, The Netherlands: Inspectie van het Onderwijs.
- Inspectorate of Education (2010c) *Besturing en Onderwijskwaliteit in het MBO*. Utrecht, The Netherlands: Inspectie van het Onderwijs.
- Inspectorate of Education (2011) *2012 Supervision Framework for Vocational and Adult Education (BVE)*. Utrecht, The Netherlands: Inspectie van het Onderwijs.
- Janssens FJG and De Wolf I (2009) Analyzing the assumptions of a policy program; an ex-ante evaluation of “educational governance” in the Netherlands. *American Journal of Evaluation* 30(3): 411–425.
- Kaptein M (2007) Developing and testing a measure for the ethical culture of organizations: The corporate ethical virtues model. *Erim Report Series Research in Management*, ERS-2007-084-ORG.
- Land D (2002) Local school boards under review: Their role and effectiveness in relation to students' academic achievement. *Review of Educational Research* 72(2): 229–278.
- Leeuw F (2002) Soft controls en doelmatigheid. In: Kraak A and Oosterom R (eds) *Agentschappen: Innovatie in Bedrijfsvoering. Een Resultaatsgericht Besturingsmodel bij Uitvoeringsorganisaties bij de Rijksoverheid*. Den Haag, The Netherlands: Sdu Uitgevers, pp.76–88.
- Lückerath-Rovers M (2011) *Mores Leren: Soft Controls in Corporate Governance [Oratie]*. Breukelen, The Netherlands: Nyenrode Business University.
- McNamara G and O'Hara J (2008) The importance of the concept of self-evaluation in the changing landscape of education policy. *Studies in Education Evaluation* 34(3): 173–179.
- MBO council (2016) Facts and figures. Available at: <http://www.mboraad.nl/?category/4281/Feiten+++cijfers.aspx> (accessed 25 February 2016).
- Meyer M and Gupta V (1994) The performance paradox. *Research in Organizational Behaviour* 16: 309–369.
- Petit R, Van Esch W, Van de Venne L and Groenberg R (2012) Leren of profileren? *Meso Magazine* 185.
- Porter DO (2012) Co-production and network structures in public education. In: Pestoff V, Brandsen T and Verschuere B (eds) *New Public Governance the Third Sector and Co-Production*. New York: Routledge, pp.145–169.
- Portes A (1998) Social capital: Its origins and applications in modern sociology. *Annual Review Sociology* 24: 1–24.
- Power M (1997) *The Audit Society*. Oxford: Oxford University Press.
- Saatcioglu A, Moores S, Sargut C and Bajaj A (2011) The role of school board social capital in district governance: Effects on financial and academic outcomes. *Leadership and Policy in Schools* 10(1): 1–42.
- Scott J (2000) *Social Network Analysis*. 2nd ed. London: Sage Publications.
- Speklé RF and Verbeeten FHM (2014) The use of performance measurement systems in the public sector: Effects on performance. *Management Accounting Research* 25(2): 131–146.
- Spillane JP and Seashore Louis K (2002) School improvement processes and practices: Professional learning for building instructional capacity. *Yearbook of the National Society for the Study of Education* 101(1): 83–104.
- Taylor J (2014) Organizational culture and the paradox of performance management. *Public Performance and Management Review* 38(1): 7–22.
- Thomsen M, Karsten S and Oort FJ (2014). Social exchange in Dutch schools for vocational education and training: The role of teachers' trust in colleagues, the supervisor and higher management. *Educational Management Administration & Leadership* 1–17 (published online September 2014). DOI: 10.1177/1741143214535737.
- Van Dooren W, Bouckaert G and Halligan J (2010) *Performance Management in the Public Sector*. London: Routledge.

- Van Esch W and Teelken C (2008) Veranderingen in de sturingsbalans tussen overheid en bve-instellingen. In: Houtkoop W, Karsten S and Van Wieringen AML (eds) *Controverse en Perspectief in het Beroepsonderwijs*. Antwerp/Apeldoorn: Garant, pp.313–332.
- Van Thiel S and Leeuw FL (2002) The performances paradox in the public sector. *Public Performance & Management Review* 25(3): 267–281.
- Vosselman E and Van der Meer-Kooistra J (2009) Accounting for control and trust building in interfirm transactional relationships. *Accounting, Organizations and Society* 34(2): 267–283.
- Wasserman S and Faust K (1994) *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.
- Weick KE (1976) Educational organizations as loosely coupled systems. *Administrative Science Quarterly* 21(1): 1–19.

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