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The Influence of Performance Measurement Systems on the Behavior of Teachers in the Netherlands

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Abstract

Over the last decades, the quality of the Dutch educational system continuously decreased. At the same time, through the rise of New Public Management (NPM), performance measurement systems became more important in the public sector. In previous research, it has been suggested that the primary goal of using performance measurement systems is to improve the quality of an organization. Consequently, the teachers, who are at the core of the Dutch educational system, are subjected to the use of performance measurement systems. Previous research indicates that the implementation of performance measurement systems, rewards and punishments attached to performance measurement systems, and personal consequences individuals experience through the use of performance measurement systems can significantly affect the behavior of individuals. In this research, semi-structured interviews have been conducted with eight participants to investigate what the influence of performance measurement systems is on the behavior of Dutch secondary school teachers. The results of those interviews show that Dutch secondary school teachers rarely receive any feedback from their superiors. Furthermore, no direct rewards or punishments are attached to the use of performance measurement systems in the Dutch educational system. So, a teacher's behavior is barely influenced by the use of performance measurement systems.

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1 Introduction

Currently, a lot of debate is going on about the quality of the Dutch educational system. The Dutch newspaper “De Volkskrant” recently released an article called: “Inspectorate wants to turn negative trend in education quickly around” (Ezzeroli, 2022, p. 10). This article emphasizes that the quality of the educational system in the Netherlands is decreasing, as is illustrated by the decreasing performance of pupils in the Netherlands (Ezzeroli, 2022). The decrease in performance is also shown by the PISA scores. The PISA score indicates the skills and knowledge of 15-year-old children regarding their reading, mathematics and science. The PISA score gets measured every three years (OECD, n.d.). The PISA scores of the Netherlands have been decreasing since they started to measure those scores (Vermeer & Van der Steeg, 2011). At the same time, performance measurement systems became more important at Dutch secondary schools, as can be seen by the increasing importance of performance indicators at Dutch secondary schools (Hidding, 2009). The growing importance of performance measurement systems is mainly caused by the rise of New Public Management (NPM). NPM started to arise at the end of the 20th century. NPM can be seen as a political, corporate and scientific stream that aims to make organizations that are operating in the public sector work like a business (Visser & Den Bakker, 2018).

Consequently, performance measurement systems play an important role in our society nowadays. Performance measurement systems can be defined as “the set of metrics used to quantify both the efficiency and effectiveness of actions” (Neely, Gregory, & Platts, 1995, p. 81). Performance measurement systems can have a variety of effects on organizations. They can, for example, lead to establishing goals and measuring results, point management towards a particular area in need of their attention, and provide management with information to monitor everything better (Holzer & Kloby, 2005; Perrin, 1998). Organizations can subsequently be improved based on the new insights that performance measurement systems offer to management. There are different types of performance measurement systems that can lead to the previously mentioned points. Examples of different types of performance measurement systems that can be used are the balanced scorecard, strategy maps, success and risk maps, and

key performance indicators (Paranjape, Rossiter & Pantano, 2006; Velimirović, Velimirović & Stankovic, 2011).

The way performance measurement systems are used and the possible consequences attached to them can significantly influence the behavior of individuals (Hopwood, 1974). However, it must be acknowledged that there are different ways performance measurement systems can be used in an educational system and subsequently, can differently influence the teachers' behavior. This is illustrated by the significant differences in the use of performance measurement systems between countries such as the United States of America (US) and the United Kingdom (UK), and a country such as Finland (as can be seen in *Appendix 1*). The US and the UK can be seen as the mainstream countries regarding the use of performance measurement systems in their educational systems and are on the one side of the spectrum. They implemented some strict performance measurement systems in their educational systems, with severe rewards and punishments attached to them. The way performance measurement systems are used in those countries also had some severe personal consequences for teachers as well. On the contrary, Finland uses performance measurement systems completely differently and is on the other side of the spectrum. Finland does not use any strict performance measurement systems and does not attach severe rewards and punishments to a teacher's performance. Yet, it remains unclear how performance measurement systems are used in the Netherlands and how it influences the behavior of Dutch secondary school teachers.

Even though performance indicators have become more important over time in the Netherlands, the quality of education in the Netherlands has decreased continuously. Consequently, it would not be surprising if the pressure has been increasing on different aspects of the Dutch educational system. Therefore, the Dutch government attempted to turn the negative trend around, as the schools received 150 million euros in 2014 to ensure that teachers would keep working in the educational system (Onderwijsraad, 2018). The financial injection should also protect the quality of the Dutch educational system. Despite this initiative, it did not appear that the quality of the Dutch educational system had improved. Instead, the quality of the

Dutch educational system decreased even more over the last few years. Besides the PISA scores, the decrease in quality is also indicated by the significant increase in pupils failing their classes between 2016 and 2019, as shown in *Figure 1* (Inspectie van het Onderwijs, 2021, p. 93). There was a significant decrease in the number of pupils who failed their classes in 2020. However, the decrease only occurred due to the softer demands for pupils to pass their classes given the Covid-19 situation. Therefore, the rate of pupils failing their classes is expected to rise significantly after the Covid-19 crisis (Inspectie van het Onderwijs, 2021).

Aandeel zittenblijvers

In het schooljaar 2019/2020 bleven minder leerlingen zitten dan in eerdere jaren.

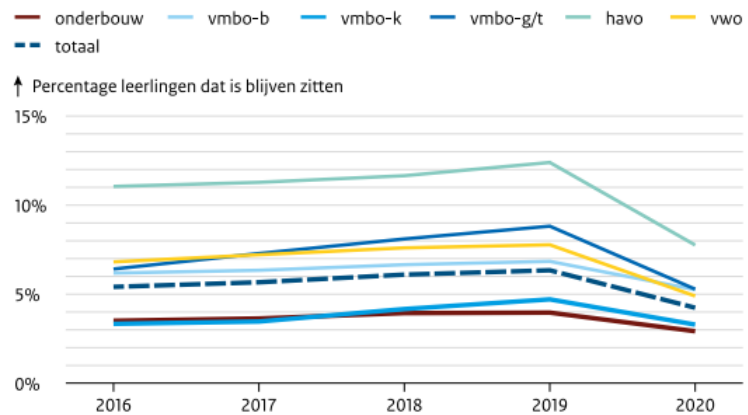


Figure 1: number of pupils that failed to pass their class (Inspectie van het Onderwijs, 2021, p. 93)

Nevertheless, it is important to emphasize that teachers are at the core of the Dutch educational system. Teachers have a vital role in ensuring that the school's performance will be of sufficient quality (Donkers, 2014). Teachers are supposed to ensure that the performance of their pupils is in line with the quality demands of the Dutch Inspectorate of Education (Inspectie van het Onderwijs, 2020). However, there are currently some worrying developments going on regarding the teaching profession in the Netherlands. Teachers feel that there is a need to improve their salaries and decrease the work pressure they experience (NOS, 2020). The Covid-19 situation worsened the situation for teachers and increased the work pressure on teachers (Inspectie van het Onderwijs, 2021). It is also assumed that teachers are in need of extra education to ensure that the quality of the Dutch educational system will be of sufficient level (Ezzeroli, 2022). Besides, improving the working conditions for teachers could be very important as there is a shortage of teachers, which also threatens the quality of the Dutch educational

system. Children are sometimes even sent home because the school can not find teachers to teach them (Inspectie van het Onderwijs, n.d.; LAKS, 2019). However, it remains unclear if the increasing usage of performance indicators also has any influence on Dutch teachers.

Thus, there appears to be a gap in the scientific literature on the link between the use of performance measurement systems and its potential influence on the behavior of secondary school teachers in the Netherlands. Given the problems Dutch secondary school teachers experience and the increasing importance of performance indicators in the Dutch educational system, it will be interesting to see how performance measurement systems influence the behavior of teachers individually. It is also unclear how teachers are precisely being evaluated in the Dutch educational system, what rewards and punishments are attached to their performance and if there are any personal consequences for teachers through the use of performance measurement systems. Therefore, the main goal of this research is to find out how performance measurement systems influence the behavior of Dutch secondary school teachers. The main research question of this paper will be **“What is the influence of performance measurement systems on the behavior of Dutch secondary school teachers?”**.

In an attempt to answer this research question, a qualitative research will be performed. The evaluation of an employee is a process in which a school leader is involved as well. Therefore, in-depth interviews will be held with secondary school teachers of two different secondary schools in the Netherlands and a team leader or a divisional leader of each school. This will then provide an interesting perspective on how school leaders think that the behavior of teachers can be influenced through the use of performance measurement systems. Besides, the main advantage of using in-depth interviews is that they allow the interviewer to dive into the teachers' personal experiences. The in-depth interviews should provide a clear overview of how performance measurement systems influence the behavior of secondary school teachers in the Netherlands. This study will be based on the phenomenological perspective and will be conducted by using the deductive approach.

This Master's Thesis in Economics will be organized as follows. Chapter two of this paper contains the theoretical background that forms the basis for the study. Chapter three then gives an overview of the methodological approach of this study. Chapter four provides an overview of the analysis that has been conducted for this study based on the interviews. Lastly, chapter five contains the conclusion and the discussion based on the results of this research.

2 Theoretical background

In an attempt to understand how performance measurement systems can influence the behavior of teachers, different concepts will be addressed. At first, the concept of NPM will be addressed. After that, the focus will be on how performance measurement systems are generally used. Furthermore, a closer look will be taken at the measurement-reward process model, as this model illustrates the necessity of using performance measurement systems. The measurement-reward process model shows how performance measurement systems can influence individuals' behavior. Consequently, it becomes clear that three factors are essential when analyzing the influence of performance measurement systems on an individual's behavior. Firstly, it appears that the implementation process is a crucial factor when analyzing the influence of performance measurement systems on the behavior of an individual, as there are different ways to implement performance measurement systems. Secondly, a closer look has been taken at the rewards and punishment attached to performance measurement systems. There are likely to be some rewards and punishments for employees applicable when they are able to meet or are not able to meet certain performance measures that can influence their behavior. Thirdly, it also appears that the use of performance measurement systems leads to some personal consequences for individuals, which also influences their behavior. Thereafter, a closer look will be taken at how NPM can influence an educational system and how performance measurement systems can be used in an educational system.

2.1 New Public Management

It is important to get a thorough understanding of what the concept of NPM exactly is. NPM can be described as: “a move towards a governance approach that places emphasis on transparency, performance management and accountability of public sector employees and managers” (Heyer, 2011). Hood (1991) illustrated that there are different reasons as to why NPM is so important. There is, for example, the need to set clear goals in public organizations, to put new emphasis on the output of a public organization, for competitiveness in public organizations, and to do more with less (Hood, 1991). Therefore, the main goal of NPM is to reorganize public organizations to

make them operate similarly to how businesses operate (Visser & Den Bakker, 2018; Dunleavy & Hood, 1994). NPM started in Anglo-Saxon countries like the UK and New Zealand. After a while, it spread to most western countries, such as the Netherlands (McLaughlin, Osborne, & Ferlie, 2002). NPM started to arise in the Netherlands during the 1980s due to an economic recession. The economic recession led to public budgets being closely monitored by the Dutch government. Consequently, it became clear that there was a lack of productivity and hierarchy in the administrative organization of the Dutch government. The Dutch government also appeared to have little control over the bureaucratic processes, such as the budgeting process (McLaughlin et al., 2002). Therefore, the system needed to be restructured. This restructuring in the Netherlands became known as the Tilburg Model. The Tilburg Model increased the importance of output budgeting and performance indicators. The Dutch government also introduced cost accounting and lump-sum budgets (McLaughlin et al., 2002). The introduction of cost accounting and lump-sum budgets also led, eventually, to the introduction of performance measurement systems in the Dutch educational system (Speklé & Verbeeten, 2013).

2.2 Performance measurement systems

One of the main goals of performance measurement systems is to ensure that companies can achieve their goals and objectives (Ghalayini & Noble, 1996). Besides, performance measurement systems are deemed to be essential for evaluating an organization's performance (Sorooshian, Aziz, Ahmad, Jubidin, & Mustapha, 2016). The performance measurement system allows a company to evaluate, control and improve its processes. Furthermore, performance measurement systems enable people to compare the performance of different companies and compare the performance of employees within and outside the organization (Ghalayini & Noble, 1996). Therefore, it is important to acknowledge that a performance measurement system can also be used to measure the performance of an individual, such as an employee (Tangen, 2005). However, there are also some potential issues with using performance measurement systems. Superiors and employees are not always in favor of using performance measurement systems. It also has been indicated that using performance measurement systems can negatively influence an employee's motivation, especially in the public sector. The use of performance measurement

systems could then result in stress, demotivation or even a burnout from people from whom the performance is measured. Employees started even doubting whether the performance measurement process was fair (Kim & Holzer, 2016).

The way performance measurement systems are being used has changed over the years. It is important to point out that the main focus of the original performance measurement systems used to be on financial data. However, non-financial data became just as important as financial data (Ghalayini & Noble, 1996). The introduction of the balanced scorecard also illustrated the increasing importance of non-financial measures. The balanced scorecard has a total of four perspectives which are (1) the financial perspective, (2) the customer perspective, (3) the internal business perspective and (4) the innovation and learning perspective (Kaplan & Norton, 1992). Another important way for an organization to determine its success is by developing key performance indicators. Key performance indicators can be financial and non-financial indicators that organizations can use to see how successful they are in achieving their goals (Velimirović et al., 2011). Other performance measurement systems that developed over the years are the supportive performance measures matrix, the SMART pyramid, the Results/Determinants Matrix and the Performance Prism (Bourne, Neely, Mills, & Platts, 2003). Due to the wide variety of performance measurement systems that an organization can use, it is important to emphasize that every organization uses different performance measurement systems. Consequently, every organization must determine which performance indicators and performance measures are relevant to its own situation (Batti, Awan, & Razaq, 2014).

2.3 The influence of performance measurement systems on employees' behavior

Performance measurement systems can, besides measuring the performance of an organization, also be used to measure the performance of an individual. The scientific literature illustrates that the use of performance measurement systems can potentially influence the behavior of employees (Hanna, Burns & Backhouse, 1998; Hanna & Burns, 1997; Neely et al., 1995; Kim & Holzer, 2016; Hopwood, 1974; Owais & Kiss, 2020). The measurement-reward process model

from Hopwood (1974) illustrates that using performance measurement systems can lead to the alignment of an organization's and its employees' goals. Therefore, this model indicates that the use of performance measurement systems can significantly influence an individual's behavior. The scientific literature shows that different factors need to be taken into account to understand how an individual's behavior might be influenced through the use of performance measurement systems.

Firstly, the focus is on the implementation process of a performance measurement system, as it has become clear that the implementation process of a performance measurement system by itself can have some severe consequences for an organization (Owais & Kiss, 2020). The implementation of a performance measurement system can influence the organizational capabilities and the organizational performance in a variety of ways. Even just the implementation of a performance measurement system can severely affect an employee's behavior (Owais & Kiss, 2020). Therefore, it is critical to consider that there are a wide variety of ways to implement performance measurement systems (Wouters & Sportel, 2005).

Secondly, it is necessary to emphasize that, after a performance measurement system is implemented in an organization, certain rewards and punishments can get attached to the performance measurement system used by an organization. When potential rewards or punishments are linked to an employee's performance, his behavior might also change (Hopwood, 1974). It is vital to link the potential rewards of employees to the use of a performance measurement system, as it is assumed to be crucial to ensure that the use of performance measurement systems will be beneficial to an organization (Tung, Baird, & Schoch, 2011).

Thirdly, the use of a performance measurement system can also have some significant personal consequences for employees. Performance measurement systems can, for example, motivate employees to perform well (Ukko, Tenhunen & Rantanen, 2008). This will then obviously be beneficial for the quality of an organization as well. However, the use of a performance measurement system can also bring some severe costs for an individual with it. It can, for

example, result in stress, a feeling of injustice, or conflicting goals for an individual (Van der Kolk, 2022). Therefore, the use of a performance measurement system has possibly some severe personal consequences for employees, which in turn might also affect their behavior.

2.3.1 The measurement-reward process model

As described in the book of Hopwood (1974), the measurement-reward process model indicates the necessity of minimizing the influence of goal congruence on an organization to ensure that it can achieve its original purposes. This model indicates the possibility that an individual's personal goals differ from those of the organization. Consequently, goal congruence between the personal goals of the individuals working for an organization and the goals of the organization itself can negatively affect the probability that an organization accomplishes its purposes. In an attempt to minimize the influence of this goal congruence, performance measurement systems are deemed to be necessary. An organization can then make use of a performance measurement system that measures the performance of employees and subsequently rewards the performance of employees if their performance is in line with the organization's purposes. The use of rewards and punishments should lead to employees adjusting their behavior to ensure that they behave in line with the organization and, therefore, it should result in a lower goal congruence. Hence, this should lead to an increase in the performance and quality of an organization (Hopwood, 1974). An overview of the measurement-reward process model is presented in *Figure 2*.

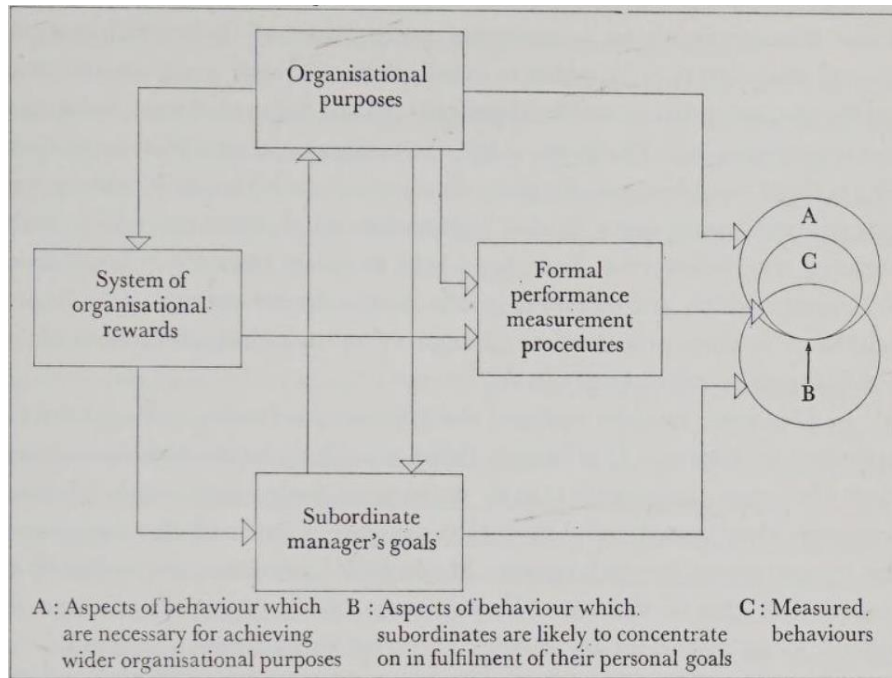


Figure 2: The measurement-reward process model (Hopwood, 1974, p. 97)

So, as the model above illustrates, there are two completely different sets of goals. On the one hand, there are the organizational purposes that an organization wishes to achieve (Circle A). On the other hand, there are the personal goals that an individual wants to achieve (Circle B). According to the model of Hopwood (1974), the goal congruence between the individual and the organization can become less when certain behavior is measured and, consequently, will be rewarded accordingly. An organization will obviously measure the behavior they want to achieve (Circle C) and not the behavior an individual wants to achieve. The measurement of behavior should change an individual's behavior and move the individual's behavior towards the behavior that an organization deems to be necessary for achieving its purposes. After all, the individual is incentivized to achieve the organization's goals. If the behavior measured is not in line with the organizational purposes, an individual will be driven away from the purposes an organization wants to achieve (Hanna & Burns, 1997). This will result in dysfunctional behavior of an individual from an organization's perspective. Therefore, it is important that an organization implements the right performance measurement system and attaches the right rewards to the performance measurement system used in an organization. Attaching the right rewards to the performance

measurement system ensures the alignment of the individual's behavior with the organization's behavior (Hanna et al., 1998).

Furthermore, the necessity of aligning the performance measurement system that is being used with the organizational missions is illustrated by the study of Stone & George (1997). This study demonstrates the possibility of good reward systems influencing the performance outcomes in public-sector organizations. Stone & George (1997) empirically show the need to align performance measures with organizational missions. This alignment will then provide the organization with the possibility to shape its strategic direction (Stone & George, 1997). It is also being argued that public organizations with multiple tasks and tasks that are difficult to measure, should monitor the agents more closely and use subjective compensation schemes. When a public organization fails to implement subjective compensation schemes, it could potentially lead to inefficiencies in the organization (Burgess & Ratto, 2003). Therefore, the successful use of a performance measurement system requires careful consideration of how it can be used as it should contribute to the alignment of an employee's individual goals and the organization's goals.

2.3.2 The implementation process of a performance measurement system

Organizations can have different reasons to implement a performance measurement system. Some of those reasons are: identifying areas that require attention, strengthening accountability, improving communication or monitoring progress, and aligning the goals of an individual with the goals of an organization (Waggoner, Neely & Kennerley, 1999; Owais & Kiss, 2020; Hopwood, 1974). Therefore, different factors influencing a performance measurement system's implementation must be considered.

The first factor considered is the type of performance measurement system implemented in an organization, as performance measurement systems can be implemented in different ways (Propper & Wilson, 2003). Besides, it is emphasized that deciding on what you want to measure, how you want to measure it, and the targets you want to achieve, can severely influence the individuals and groups within the organization (Bourne et al., 2003). Subsequently, which type of performance measurement system is implemented can significantly influence an organization

and its employees. The second factor that needs to be considered is employee involvement in the implementation of a performance measurement system. It is argued that employee involvement will ultimately have a positive influence on the effectiveness of a performance measurement system (Tung et al., 2011). A prerequisite is that the employee being evaluated and the employer responsible for the evaluation agree on the performance objectives (Singh & Twalo, 2015). This could result in better communication and better acceptance of feedback and goals. Hence, all the employees should be able to provide their opinion about the criteria and targets used to evaluate their performance (Ukko, Karhu & Pekkola, 2009). The third factor that needs to be considered is that every individual subjected to a performance measurement system must perceive it to be a fair system. When an individual thinks of a system as unfair, it will limit the potential positive influence a performance measurement system can have. Therefore, the measures must be understandable, fair and in line with strategy (Ukko et al., 2009). The fourth factor regarding the implementation of a performance measurement system is the need for performance measurement systems to have a clear goal, as performance measurement systems can have a variety of purposes (Jääskeläinen, Lönnqvist, & Kulmala, 2015). Some examples of the goals performance measurement systems can have are modernizing the process of public budget and planning (more focus on output and output indicators instead of financial needs), monitoring and reporting (information on the quality of services) and managing the performance (the process of directing and controlling employees and work units) (Jääskeläinen et al., 2015). Furthermore, performance measurement systems can also be used to assess employees, compare different organizations' performances and make intra-organizational comparisons (Ghalayini & Noble, 1996). So, performance measurement systems can have a lot of different goals. However, most important is that the goals of the performance measurement systems are reasonable and realistic (Singh & Twalo, 2015). The last factor is the perceived usefulness of a performance measurement system. There appears to be a lack of evidence on the usefulness of performance measurement systems in organizations. However, when performance measurement systems are assumed to be useful, they can also have an influence on employees' behavior (Propper & Wilson, 2003). Nevertheless, it is questioned if performance measures are helpful for organizations to achieve

their goals. Therefore, it is emphasized that the usefulness of performance measurement systems must be considered carefully when implementing them (Jääskeläinen et al., 2015).

2.3.3 The rewards and punishments attached to the use of performance measurement systems

One of the most important consequences of using a performance measurement system is that it can lead to various rewards and punishments for the employees working within the organization as their performance gets measured. An individual's behavior can be influenced by attaching rewards and punishments to a performance measurement system (Neely et al., 1995; Hopwood, 1974). Besides, it is suggested that linking an employee's performance to potential rewards is a vital factor in positively impacting the effectiveness of a performance measurement system in an organization (Hopwood, 1974; Tung et al., 2011). Therefore, different factors must be analyzed to grasp the consequences for the behavior of employees subjected to a performance measurement system.

The first factor that illustrates a possible reward or punishment attached to a performance measurement system is the use of performance-related pay. In the study by Forrester (2011), it is pointed out what performance-related pay is: "Essentially performance-related pay (PRP) links an individual's pay to their performance, which is usually measured against predetermined objectives or targets." (Forrester, 2011, p. 6). Performance-related pay is, in particular, considered to be helpful as a strategic (managerial) tool to improve an organization's performance and the performance of the individual subjected to performance-related pay (Forrester, 2011). It is implied that performance-related pay will result in employees putting in more effort (as their salary will be linked to their performance). Besides, using performance-related pay could attract better-skilled workers for an organization (Booth & Frank, 1999). Those potential benefits could then lead to an increase in the quality of an organization. However, some potentially negative consequences can also come with the use of performance-related pay. It is argued that performance-related pay can have a negative influence on an employee's attitude and might negatively affect the intrinsic motivation of an employee (Perry, Engbers, & Jun, 2013). The second factor is that an employee's job can be in jeopardy through the use of a performance

measurement system, as everything becomes visible to management. Therefore, with the use of a performance measurement system, it will be easier for management to compare and analyze the performance of their employees. The use of a performance measurement system can also result in employees worrying about their performance. The employees' worries become even more intense when they are convinced that others might do their job better or more effectively (Jääskeläinen et al., 2015). The third factor is the influence of performance measurement systems on an employee's career trajectory. Performance appraisals can significantly influence an employee's potential promotion or layoff (Mishken & Juhasz, 2008). Through the use of performance measurement systems, the nature of teaching has become more visible as everything gets measured. With everything becoming visible, the career trajectory of a teacher gets directly linked to meeting performance measures (Forrester, 2011). As a consequence, the career of a teacher might be positively (negatively) influenced when a teacher does (not) meet those specific performance measures.

2.3.4 The personal consequences attached to the use of performance measurement systems

Performance measurement systems can significantly affect employees, as there can be some personal consequences attached to the use of a performance measurement system (Ukko et al., 2008; Bourne, Neely, Platts & Mills, 2002). Different factors illustrate the possible personal consequences attached to the use of a performance measurement system. The first factor is competitiveness. Performance measurement systems can increase an organization's competitiveness with other organizations (Forrester, 2011; Tung et al., 2011). Besides, it can also lead to more competitiveness within an organization (Ball, 2003). Subsequently, it would not be surprising if the increase in competitiveness would result in employees wanting to perform as good as possible and perform better than their peers. Therefore, the increase in competitiveness could result in a more competitive culture within an organization (Forrester, 2011). The second factor is the need to analyze how the evaluation takes place as a consequence of the use of a performance measurement system. It is suggested that it is important for employees to receive continuous feedback on their performance, as this will provide the employees with the opportunity to improve their performance on short notice. Besides, it might stimulate the

employees to apply for extra training in an attempt to enhance their performance as much as possible (Singh & Twalo, 2015). It is also stated that the use of a performance measurement system could identify which specific training an employee needs. (Kim & Holzer, 2016). Therefore, if an employee performs poorly, he or she is perhaps in need of some extra training. The third and fourth factors are (de)motivation and stress that may arise after implementing a performance measurement system. The study of Kim & Holzer (2016) indicates that performance appraisal may lead to a crowding-out effect among the employees in a public organization. Consequently, it may result in stress, demotivation, and it could even result in a burnout among employees (Kim & Holzer, 2016). However, performance appraisal could also enhance employee motivation, as it may illustrate the effort an employee puts into his or her job (Idowu, 2017).

2.4 NPM in the educational system

In the paper of Tolofari (2005), it is implied that the introduction of NPM can have severe consequences for a country's educational system. The roles and relationships within a school can, for example, change because the management of a school becomes more hierarchical. Besides, the introduction of NPM led to an increased emphasis on accountability toward parents and other community stakeholders. Furthermore, the introduction of NPM led to the budgets of schools being determined by the number of pupils enrolled. Lastly, the performance within the educational system became more important as well. These changes within the educational system should, eventually, improve the quality of education (Tolofari, 2005).

The introduction of NPM in the Dutch educational system also led to some significant changes. First of all, an output-oriented governance model was introduced in the Netherlands. This means that the Ministry of Education, Culture and Science in the Netherlands introduced objectives in line with their vision and that schools got monitored based on those objectives. Second, there appeared to be government deregulation, which means that the decisions initially taken by the Dutch Ministry of Education, Culture and Science are, from now on, taken by the schools themselves (Van der Sluis, Reezigt, & Borghans, 2017). Third, performance measurement systems have become more important in the Dutch educational system as well. Performance

measurement systems should ensure that the organizational objectives of the school will be achieved (Speklé & Verbeeten, 2013).

2.5 Performance measurement systems in the educational system

A performance measurement system can be used in multiple ways in an educational system. The most important reasons for implementing a performance measurement system in the educational system are to set realistic objectives for an individual to achieve, monitor the individual's performance, and evaluate the performance (Forrester, 2011). Performance measurement systems also provide society with easy-to-follow measures of how schools are performing. An example of a performance measurement system used in the educational system is looking at raw exam scores (Propper & Wilson, 2003). There are also other options to use a performance measurement system in the educational system. In the study of Storey (2002), the use of a balanced scorecard is being proposed to evaluate a school's performance. The balanced scorecard can, for example, include attitude survey/satisfaction ratings, extra-curricula activities, cash flows and staff satisfaction ratings (Storey, 2002). Performance measurement systems can also significantly influence teachers' salaries as they may get rewarded if they perform well according to the performance measurement system (Forrester, 2011). Furthermore, the use of performance measurement systems can also have some personal consequences for teachers (Ukko et al., 2008). Some teachers might find it motivating to have their performance measured, while others might find it stressful. The behavior of teachers due to the use of performance measurement systems is significantly influenced by how performance measurement systems are used in the educational system.

3 Methodology

3.1 Instruments

In an attempt to answer the main research question, different teachers and school leaders were interviewed. A qualitative research was performed by using in-depth interviews in a semi-structured way to answer the main research question. Besides, this research is based on a deductive approach. The questions asked in those interviews were based on the dimensions and indicators illustrated in *Appendix 2*. The dimensions (“Implementation process”, “Reward and punishment”, and “Personal consequences”) and indicators were based on the scientific literature, as was mentioned in chapter 2.3. It was investigated if the different dimensions and indicators that generally come with the use of a performance measurement system are also applicable to the Dutch educational system. The dimensions and indicators used to formulate the questions for the Dutch secondary school teachers and the school leaders are briefly discussed in this section. The interview guide provides an overview of the questions asked during the interview. The interview guide is presented in *Appendix 3 (Dutch version)* and *Appendix 4 (English version)*. The answers to the questions asked in the interviews indicated if the model of Hopwood (1974) applies to the Dutch educational system and, therefore, should answer the main research question.

First, questions were asked regarding the implementation process of a performance measurement system. It is important to investigate how a teacher's performance is precisely measured, as each school in the Netherlands has the freedom to evaluate a teacher's performance in any way the school seems fit (as can be seen in *Appendix 1*). Hence, there can be huge differences between schools in how they measure their teachers' performance. Therefore, answers to the questions asked can illustrate which type of performance measurement system was implemented in a Dutch secondary school. Employees may also become involved in the implementation process of performance measurement systems. Employee involvement can significantly influence the successful use of a performance measurement system. It was also investigated if teachers perceive the performance measurement system as a fair system.

Otherwise, performance measurement systems might not function as well as they could potentially do. Besides, performance measurement systems implemented in an organization can have different goals. Therefore, it was investigated what the goal of measuring the teachers' performance exactly is. Lastly, it might also be the case that teachers do not perceive performance measurement systems to be useful, which can have severe consequences for the effectiveness of a performance measurement system. Therefore, questions were asked regarding the perceived usefulness of the specific performance measurement system used at the secondary school.

After it became clear how a teacher's performance is measured and how performance measurement systems were implemented in both schools, questions were asked regarding the rewards and punishments for teachers. It could be possible that teachers' performance is related to their financial compensation. Furthermore, when teachers fail to achieve the predetermined performance criteria, their job might be in jeopardy and even their career trajectory might be influenced. So, it was investigated how secondary school teachers in the Netherlands are rewarded (or punished) when they (cannot) achieve a specific performance criteria.

Lastly, questions were asked regarding the personal consequences for Dutch secondary school teachers due to the use of a performance measurement system. The use of performance measurement systems may lead to a competitive environment within an organization. Therefore, teachers can be more competitive through the use of performance measurement systems. Besides, the evaluation of teachers can be influenced through the use of a performance measurement system. Using a performance measurement system can, for example, result in Dutch secondary school teachers receiving feedback on a continuous basis. Moreover, questions were asked regarding the possibility for teachers to follow any training if deemed necessary, as continuous feedback might stimulate teachers to follow any training to improve their performance. Furthermore, using a performance measurement system in a secondary school can result in teachers getting the idea that they are watched all the time, as in a panopticon. Therefore, the use of a performance measurement system can cause stress among teachers. It

would also be possible for teachers to be demotivated by the use of a performance measurement system. However, teachers might also perceive the use of a performance measurement system to be motivating as the use of a performance measurement system can stimulate them to perform as best they possibly can.

The main objective of this research was to investigate the influence of performance measurement systems on the behavior of teachers, as illustrated by the conceptual model in *Figure 3*. This was investigated by making use of in-depth interviews. One of the main reasons to use in-depth interviews is that the in-depth research method allows the researcher to conduct “intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation.” (Boyce & Neale, 2006, p. 3). The opportunity to collect more detailed information from the research subject is also one of the main advantages of using in-depth interviews. However, it is important to mention that there are a few pitfalls regarding this research method. The interviews can, for example, be prone to bias and the research can be time-intensive. Furthermore, it is important for the interviewer to critically consider the formulation of the questions by avoiding yes or no questions. Lastly, it is important to mention that the results are not generalizable (Boyce & Neale, 2006). This indicates that the external validity is relatively low.

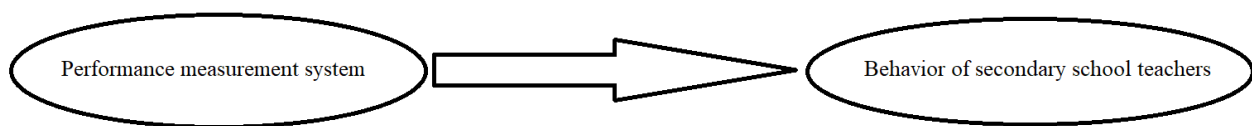


Figure 3: Conceptual model

Thus, the different dimensions were used as the main topics in the various interviews. However, the sequence in which the topics were featured in the multiple interviews was not necessarily fixed. The questions were open-ended; the interviewer had not formulated any pre-determined answer categories for the interviewee (Vennix, 2016). The most appropriate way to conduct this research was by making use of semi-structured interviews. Semi-structured interviews are particularly useful when the researcher wants to ask probing, open-ended questions and wants

to know the independent thoughts of an individual (Adams, 2015). Furthermore, it allows the interviewer to dive deeper into the interviewees' answers to the original questions.

3.2 Participants

In this study, eight in-depth interviews were conducted with employees of Dutch secondary schools. Two different schools in the Netherlands were approached through the researcher's network in an attempt to answer this question. To be able to perform this research, both schools were asked for permission to conduct this research. The goal was to interview at least three teachers and one team leader or divisional leader per school. The main reason to interview different teachers of the same school is that patterns might get identified. This can then indicate whether teachers perceive the use of a performance measurement system within a school similarly. Furthermore, by conducting interviews at two different schools, it became possible to compare different Dutch secondary schools on how performance measurement systems are used and how it influences the teachers. The reason to interview not only Dutch secondary school teachers but also a school leader (a team leader or a divisional leader in this case) is that an evaluation process can be seen as a dyadic relationship. When a dyadic approach is used in a research, it allows the researcher to get a broader and deeper insight into the research problem (Eisikovits & Koren, 2010). Therefore, a team leader or divisional leader of each school was also interviewed, as they play an important role in the evaluation process of a teacher (Kim & Holzer, 2016). By interviewing a team leader or divisional leader, it became clear what their perspective is on the use of a performance measurement system. Furthermore, the school leaders were asked about their personal views on how the use of performance measurement systems might influence teachers and their behavior. By interviewing both school leaders and teachers, it became possible to compare the school leaders' views with the teachers' views. The comparison indicated if the school leaders and the teachers were on the same page regarding the potential influence of performance measurement systems on teachers' behavior.

It is also important to point out that the respondents were randomly picked among the schools' employees. Based on the current scientific literature, selecting respondents based on specific

personal characteristics was not deemed to be necessary. Therefore, it was considered to be irrelevant for this research if the teacher was teaching pupils that are currently in the first few years of secondary school (“onderbouw”) or if the teacher was teaching pupils that are currently in the last few years of secondary school (“bovenbouw”). It was for this research also irrelevant if the teacher was teaching a specific level. This could have been either be the VMBO, HAVO or VWO level. Lastly, it was irrelevant for this research which subject the teacher teaches. There were no reasons to believe that selecting the respondents based on the characteristics mentioned here was necessary, as it was not expected to lead to different results.

3.2.1 Macropedius College

Both schools gave permission to conduct this research among their employees. Both schools were also allowed to stay anonymous during this research. However, both schools declined to make use of that possibility. The first school that was approached was het “Macropedius College”. This is a school located in the town of Gemert. It is a school for students operating at the HAVO or VWO level (Commanderij College, 2022). This school provides education for just over a thousand pupils (Kennisset, 2022). At first, an interview was conducted with the divisional leader of the HAVO, Linda Duijff. She declined the possibility to stay anonymous during this research. After the interview with Mrs. Duijff was conducted, interviews were conducted with three teachers at Macropedius College. The three teachers that were willing to cooperate were Debby (she wanted her last name to remain anonymous), Ingrid Goossens, and Luuk van de Weijer.

3.2.2 Zwijsen College

The second school that was approached was het “Zwijsen College”. This is a school located in the town of Veghel. It is a school for students operating at the MAVO/HAVO level and the HAVO/VWO level (Zwijsen College, 2022). This school provides education for just over 1400 pupils (Kennisset, 2022). At first, an interview was conducted with the team leader of the first-year pupils (de brugklas) and the second-year pupils, Carlo Hazenveld. He declined the possibility to stay anonymous during this research. After the interview with Mr. Hazenveld was conducted, interviews were conducted with three teachers at Zwijsen College. The three teachers that were

willing to participate in this research were Respondent A (he preferred to stay anonymous), Frans van der Linden and Jesper Bexkens.

A complete overview of the name of the respondents, their functions, the interview's duration, and the date of when the interviews were held is shown in *Appendix 5*.

3.3 Procedure

Before the interviews were actually conducted, a test interview was held with a teacher who was not employed by Macropedius College or Zwijsen College. The main goal of this test interview was to investigate if the questions were clear. Besides, it also allowed the researcher to test if there were any inconveniences within the interview guide. The “real” interviews took place face-to-face at the secondary schools themselves. The duration of the interviews was between forty and sixty minutes, and the interviews were (voice)recorded. The interviewees also had the possibility to stay anonymous during this research, and some of the teachers made use of this possibility. The interviewees were also informed upfront about the procedure and they also had the opportunity to ask the interviewer questions, both before and after the interview.

After the interviews were conducted, a vital phase started. To begin with, all of the interviews needed to be transcribed. After that, all transcriptions were collected and put in the Atlas.TI program. The next step was starting the coding process. The deductive approach was used for this coding process. Every piece of information in the interviews deemed relevant for this research received a code. After that, specific code groups were created in which different codes were placed. This process can be seen in the appendix, the Atlas.TI file and the other files which contain the Atlas.TI output. After all the information was coded, the results were analyzed in chapter four.

4 Results

The findings of the interviews conducted are analyzed and presented in this chapter. To get a comprehensive picture of the results, the findings were analyzed per profession in chapters 4.1 and 4.2. In chapter 4.1, a closer look is taken at the teachers' perspectives on the use of performance measurement systems. In chapter 4.2, a closer look is taken at the school leaders' perspectives on the use of performance measurement systems.

4.1 Teachers' perspectives

Three different teachers that are working at Macropedijs College were interviewed. The three teachers who agreed to participate in this research were Debby, Mrs. Goossens, and Mr. van de Weijer. Mr. van de Weijer is the only teacher who has a temporary contract. Mrs. Goossens and Debby have a permanent contract. Furthermore, three different teachers that are working at Zwijsen College were interviewed. Respondent A, Frans van der Linden and Jesper Bexkens agreed to participate in this research. All three teachers have a permanent contract.

All six teachers feel that it is the school's goal to prepare the pupils for the future and ensure that the pupils can develop themselves. The teachers that were interviewed appeared to have different personal goals. The different personal goals of the teachers include either supporting the pupils as best they can, making sure that the pupils are interested in their course, providing pupils with the opportunity to make their own choices in class or just simply teaching the pupils about their subject. At the same time, the teachers think that the school they work for has certain expectations of them as well. The teachers think that the school expects high-quality classes from them, and the teachers think that it is also expected of them to supervise their pupils whenever necessary.

The analysis of both the teachers' perspectives and the school leaders' perspectives started by looking at the implementation process of the performance measurement systems. Furthermore, a closer look was taken at the rewards and punishments attached to the performance

measurement systems used. Lastly, it was investigated what the personal consequences for teachers were when a performance measurement system is used to evaluate their performance.

4.1.1 Implementation process

The Covid-19 situation had a significant influence on the performance measurement of teachers. Mrs. Goossens pointed out that the performance measurement of teachers got severely disrupted:

“However, you also might have heard from other people that over the last few years with the Covid-19 situation, there rarely were any evaluations or development talks or anything like that.” (Mrs. Goossens)

Nevertheless, to measure the performance of a teacher, in-class observations and development talks usually take place at Macropedijs College:

“Yes, what most of the time happens is, we have progress talks and usually the divisional leader also attends a class once” (Debby)

During those in-class observations, different indicators are used to evaluate the teachers. The teacher's performance is generally measured based on a form containing different indicators. Those indicators can be from the Inspectorate of Education, as Mrs. Goossens has pointed out, or be indicators that are added to the form by Macropedijs College. The form with indicators is after the in-class observation discussed in a so-called development talk. Subsequently, it appeared that pupils' test scores do not play a big part in the evaluation process. Furthermore, it must be emphasized that the teachers also have the opportunity to point out their preferences on how they want their performance to be measured. According to Mr. van de Weijer, teachers have the opportunity to name a few indicators which they find important ahead of an in-class observation. Besides, according to Debby, teachers have the chance to decide which goals they want to pursue at the start of the year.

At Zwijsen College, it appeared that teachers are roughly evaluated in the same way as the teachers at Macropedijs College. Respondent A and Mr. Bexkens pointed out that there is a three-year evaluation cycle implemented at Zwijsen College:

“In principle, your bio-monitor is a three-year cycle. (...) In the first year, you make a POP, your Personal Development Plan (Persoonlijk Ontwikkelings Plan). You indicate what you want to achieve, how you want to achieve it, what you are proud of and where you want to work on. Well, that is what you discuss during your planning talks with your superior, which is usually the team leader. The year after, you will have a development talk. Then questions are asked as “well, how are you doing? Were you able to develop yourself? Do you need anything? Do we need to adjust anything?”. In the third year, you will have your assessment. Then you are really being assessed.” (Mr. Bexkens)

According to Respondent A and Mr. Bexkens, teachers are also assessed through a form containing different indicators. Besides, questionnaires are held among colleagues and pupils, and in-class observations are conducted by the school leader. On the contrary, Mr. van der Linden perceived this differently. He acknowledged the existence of a certain form with indicators to evaluate a teacher's performance, but he has not been assessed as a teacher very often, as he only has been assessed a few times during his career. A possible reason for the lack of assessment at Zwijsen College is that Mr. van der Linden has only been working at Zwijsen College for three years, from which two of the three years were during the Covid-19 crisis. Therefore, it might be possible that he has not yet experienced the complete three-year evaluation cycle. At the start of the cycle, the teachers at Zwijsen College also have the opportunity to point out what they find important in their POP. The indicators the teachers find important will also be considered when they are being assessed at the end of year three.

All six teachers that were interviewed perceived the use of performance measurement systems as a fair process to evaluate their performance. However, Mrs. Goossens, Respondent A, and Mr. Bexkens pointed out that there is also a subjective element to this process that can have a significant influence on how performance measurement systems are used:

“ Well, I am not sure because, look, an evaluation always has something subjective in it. (...) I think that everyone is being evaluated according to this DOT system and the indicators are the same for everyone. So, I think the system is the same for everyone. However, how they (the school leaders) will look at you...” (Mrs. Goossens)

“Yeah... Yes and no. It should be fair to begin with. However, you are dependent on your team leader.” (Respondent A)

Nevertheless, it is generally perceived to be a fair process as the indicators used to measure a teacher's performance are initially the same for every teacher.

According to all teachers, the main goal of using performance measurement systems is to check the quality of the teachers and see if everyone is functioning properly:

“Yeah, that is a good question. In principle, it should provide you insight into if you are doing a good job.” (Respondent A)

According to Debby and the teachers at Zwijsen College, another goal of using performance measurement systems is to try to increase the quality of the teachers. By using performance measurement systems, it should become visible what the flaws of a teacher are. It is also important to mention that, according to Mr. van de Weijer and Mrs. Goossens, test scores are not that important. The main goal of using performance measurement systems seems to be ensuring that the quality of teaching is of a certain level. Achieving a certain level of quality should then automatically result in a certain level of grades, but those grades do not seem to be the direct goal of using performance measurement systems.

There are different opinions about the perceived usefulness of performance measurement systems. Debby and all three teachers at Zwijsen College perceived that performance measurement systems are particularly useful to check if each teacher can reach a certain basic level:

“I understand that they (performance measurement systems) are necessary. I understand why they are essential to use because everything will go wrong if you do nothing. Do not use them for three years; everything comes to a standstill or collides. It could lead to one teacher going with the speed of a TGV and the other teacher going with the speed of a locomotive from 1830, completely going past each other. (...) Using a performance measurement system is definitely worthwhile.” (Mr. Bexkens)

Besides, according to Mrs. Goossens and Respondent A, when a teacher's performance is measured, it should also make certain aspects of a teacher's job visible that need some improvement. However, Mrs. Goossens thought the use of a performance measurement system might not be very relevant as it does not contain a lot of context. Mr. van de Weijer also emphasized this point:

“Yes, as I said, there must come some context with it. It cannot only be (...) some stiff criteria.”
(Mr. van de Weijer)

Nevertheless, Mr. van de Weijer admitted that performance measurement systems are generally useful for teachers. Besides, Mr. van der Linden pointed out that using a performance measurement system is also helpful to indicate if a teacher is on the right track. However, he emphasized that performance measurement systems could become more useful if they were used more often and when teachers would get assessed by their school leaders more often.

4.1.2 Rewards and punishments

Mr. van de Weijer indicated that there are some severe rewards and punishments attached to the use of a performance measurement system for him as a teacher, as he has a temporary contract. Therefore, he is not sure yet about his future at Macropedius College and a good performance could mean that his contract will get extended:

“However, for me, it is of course serious business. If I am not appreciated, then I think it would just be said at the end, “Well, you have signed a temporary contract, so we are not going to extend it”, so there were some severe consequences attached to it for me, but that is because I still have a temporary contract.” (Mr. van de Weijer)

Debby and the three teachers at Zwijsen College indicated that teachers who fail to meet certain performance indicators, regardless if they have a temporary contract or not, could be punished. A teacher could get more in-class visits, be forced to have more development talks with his or her superior, be detached to another school, or the school could even start building up a file which could result in the teacher being fired.

Furthermore, it did not appear that there is any form of direct performance-related pay at either of the two secondary schools. It did not appear to be common that a teacher's salary is directly linked to his or her performance. Nevertheless, Mrs. Goossens pointed out that teachers may indirectly be financially compensated when their performance is good. This can, for example, happen by covering extra education expenses of teachers, as Mrs. Goossens has experienced. It also appeared to be extremely rare for teachers to receive a bonus based on their performance. However, there seemed to be an indirect benefit for teachers when they are performing well. It appeared that a teacher's performance can partially determine if a teacher will be promoted to a different scale; this can then be the LB, LC, or LD scale:

“Yes, when you are performing extraordinary good or extraordinary bad. (...) I do obviously think they take that into account. If you achieve an “A” score in an assessment, you will not be skipping a scale necessarily, but you can use it for your job application. Yes, I really do think that it could be useful.” (Respondent A)

When a teacher is eligible for promotion, his or her salary is likely to increase as well, as a teacher will go to a different (higher) scale. Moreover, it is also possible within those scales to get a higher salary by going to a higher step within the scale. However, getting a higher salary within a scale is not linked to the performance of a teacher at all, according to Mr. van de Weijer:

“No, no. (...) You have experience scales, experience years which you build up and that just keeps going.” (Mr. van de Weijer)

So, a teacher's salary partially depends on the teacher's experience as a teacher. According to Mrs. Goossens and Respondent A, skipping a step within a scale is possible when your performance is outstanding. However, that appeared to be extremely rare. The teachers also indicated that it is nearly impossible for teachers to go back down in salary again when they are not performing well.

The teachers were also asked if they thought the use of a performance measurement system could have consequences for their own jobs. The teachers gave mixed answers regarding the

possible consequences of not meeting certain performance indicators. Mr. van der Weijer indicated that he does worry about his current job:

“Yeah, look, for me it has. Because my future depends on how I perform.” (Mr. van de Weijer)

The main reason Mr. van de Weijer worries about his current job is that he has a temporary contract. Therefore, it is relatively easy for the school to get rid of him by not extending his contract. The other teachers, who all have a permanent contract, indicated the opposite. They made it clear that the use of a performance measurement system does not make them worry about their job. Thus, failing certain performance indicators will probably not lead to any punishments in the form of a teacher getting fired because of his poor performance. However, according to Respondent A, it is essential to show that you are trying everything you can to make your classes as best possible. Respondent A pointed out that the circumstances in which a teacher operates can also play a significant role. Therefore, he was convinced that a superior takes the circumstances that might influence the results into account instead of only looking at the performance indicators.

Furthermore, Mr. Bexkens and Mr. van der Linden believed that receiving a bad performance review will not negatively affect their career trajectory. However, when Mr. van de Weijer and Respondent A were asked about their career trajectory, they believed that a bad performance could also have severe consequences for their careers:

“Yes, that is also why I wrote an appendix when I received an A score (a bad score) for a particular part. Because I also thought like, “you know, I A. do not agree with this, so I do not think it is right, and B. it is being kept in your file”, so yeah, I did find it necessary to write that appendix.” (Respondent A)

On the contrary, Mr. Bexkens, Debby and Mrs. Goossens thought a good performance review can be beneficial for their career trajectories. Mr. Bexkens was convinced that a good performance review can be helpful in receiving promotion. Although, Mr. Bexkens emphasized that a good performance review does not necessarily mean that a teacher will be eligible for promotion.

4.1.3 Personal consequences

There are different opinions on the possible influence of performance measurement systems on the sphere among teachers. Respondent A was convinced that the use of performance measurement systems has an impact on the sphere among teachers. Respondent A thought it predominantly influences the sphere among teachers with a temporary contract and teachers who are in the third year of their evaluation cycle. On the contrary, Mr. Bexkens and the three teachers of Macropedius College were convinced that performance measurement systems do not directly influence the sphere among teachers. However, the sphere will be tense when the test scores are bad, and the board calls the teachers to give them an explanation. Nevertheless, Mr. van der Linden was convinced that most teachers will not be affected by the use of performance measurement systems.

Furthermore, according to all teachers interviewed, the use of performance measurement systems does not result in a competitive environment among teachers:

“No, no, absolutely not. I think it is the other way around. When a teacher is not operating well, his or her colleagues will try to help him or her by making suggestions such as “try this or try that”. A completely different sphere.” (Mr. van der Linden)

As Debby also pointed out, this might be different compared to other sectors:

“Yeah, the educational sector does not possess the same competition as it would be the case in the business sector. (...) We have fixed salary scales and things like that, and obviously, you can go to a higher scale such as LC or LD, but it is not like you are working for bonuses or things like that.” (Debby)

So, it is safe to say that there is not really a competitive environment among teachers and subsequently, that teachers do not become competitive towards each other.

When taking a closer look at the individual evaluation of a teacher, it became clear that the teachers perceived that they get way too little feedback regarding their performance. All teachers rarely get any formal feedback from the school leaders throughout the year. Hence, teachers do not get formal feedback continuously. However, Respondent A indicated that he gets feedback

on a more regular basis, although this is usually on an informal basis. Besides, it is also possible for teachers to get feedback from their colleagues if they ask their colleagues to provide them with feedback:

“Not on my classes, because not many colleagues are watching my classes. So, I will only get feedback when I ask about it myself and when I, for example, ask my pupils about it or invite my colleagues to join my classes. (...) However, from my superior, I do not really receive any feedback on my classes.” (Mr. Bexkens)

Moreover, all teachers do get a personal budget for training and education every year, which allows them to attend different types of training:

“No, we have 600 euros trainings budget, education budget per year.” (Mr. van de Weijer)

This means that all teachers are provided with the opportunity to improve their performance by following extra training or education each year.

All teachers did, in general, not perceive the use of a performance measurement system to be stressful. However, Mrs. Goossens pointed out that she finds the use of a performance measurement system to be a bit exciting:

“Well, yes, stress is a big word for it. But, I find stress a huge word for it. Because that would imply that I would not be able to sleep because of it, but that is not the case. I do find it exciting though.” (Mrs. Goossens)

On the contrary, Debby did not find the use of performance measurement systems stressful at all. Nevertheless, she understood that this might be different for teachers with a temporary contract. However, Mr. van de Weijer indicated that he does not find the use of a performance measurement system to be stressful, but Mr. van de Weijer admitted that some healthy excitement comes along with the use of a performance measurement system.

Lastly, all teachers except Debby did not find the use of performance measurement systems motivating for their performance. According to them, the use of performance measurement

systems does not contribute to their motivation to perform as best as possible. However, Debby found the use of a performance measurement system motivating for her to perform optimally.

4.2 School leaders' perspectives

The school leaders might perceive the possible influence of a performance measurement system on a teacher's behavior completely different than the teachers themselves. The school leaders in this research were Linda Duijff, the divisional leader of the HAVO division at Macropedius College who is responsible for evaluating the teachers, and Carlo Hazenveld, the team leader of the first and second-year classes of the HAVO, who is responsible for the evaluation process of the teachers at Zwijsen College.

According to both school leaders, the goals of the schools are not only to transfer knowledge to the pupils and ensure they achieve good grades. The school is also there to guide the pupils in becoming young adults and develop themselves. So, there is an important part for the teachers to play. Therefore, Mrs. Duijff found it important for teachers to connect with their pupils. Besides, a teacher must also find the room to develop himself. There is also a crucial role for the divisional leader in that process: to guide and support the teachers as much as possible. Furthermore, Mr. Hazenveld expected from the teachers at Zwijsen College to support their pupils and provide them with the opportunity to make mistakes and guide them to become independent. The goal of Mr. Hazenveld himself is to keep developing himself and to cope with new challenges that arrive. The school also has certain expectations of Mr. Hazenveld as a team leader. It is expected from him that he will make sure that his team operates well. Besides, he is also responsible for evaluating some of the teachers at Zwijsen College. Among those teachers are also those who just started working at Zwijsen College. Mr. Hazenveld is then supposed to make an assessment in the first year of the teachers that just started working at Zwijsen College and determine if the new teachers are an asset to the school.

4.2.1 Implementation process

When questions were asked about how the performance of teachers is measured, Mrs. Duijff indicated:

“You either have a development cycle or performance cycle. When you are in a development cycle, then we are paying a visit to the teachers themselves, the teacher is coming by my office, showing what he or she is doing, and the teacher is working with his fellow teachers on “how can I develop myself.”. (...) A performance evaluation is happening in case you have a temporary contract.” (Mrs. Duijff)

Therefore, it seems that teachers with a permanent contract do not have to worry about their performance, as it appears more important for them to show that they are still developing. However, teachers with a temporary contract are evaluated much more closely. They should build a portfolio regarding their development and performance as a teacher. According to Mrs. Duijff, each teacher is also subjected to certain performance criteria, which are partially decided by the Inspectorate of Education and partly by the schools themselves. Hence, teachers' performance at Macropedius College is generally measured through a set of indicators.

At Zwijsen College, they make use of an evaluation cycle to evaluate a teacher, according to Mr. Hazenveld. The evaluation cycle is a cycle of three years. In this cycle, you start with a meeting in which a teacher lays out his own goals and in which the school leader points out what he expects of a teacher. The teacher will then start writing his POP. This is followed by a development meeting in which the development of the teacher is discussed. The cycle is then finished by an evaluation meeting in which the teacher is being evaluated. Within this evaluation cycle, some key indicators apply to every teacher, besides the teacher's personal evaluation cycle. Some important key performance indicators are, for example, pupils' test scores, the way pupils are being guided by the teacher, the rating the pupils give their teacher, and the personal investment of a teacher to develop himself. The teacher scores are then compared to a national benchmark to see if there are any deviations.

According to both school leaders, a teacher can also point out certain indicators that the teacher deems to be important. A teacher can, for example, point out that he considers it

essential to focus on the test scores of his pupils or that he wants to focus on his social development:

“Yes, yes, exactly. That are the goals that a teacher can point out in his own development plan as well.” (Mr. Hazenveld)

Furthermore, at the end of the evaluation cycle, a teacher also has his own column in which he can point out any things he disagrees on. Moreover, the school also has the possibility to add any criteria that the school deems to be important. So it appears that certain key performance indicators are used to measure a teacher’s performance.

According to both school leaders, teachers perceive the performance measurement system used as a fair system:

“Yes, when you are really talking about the performance measurement system... then I have the idea that my colleagues generally experience it as something fair. I have had only once a temporary colleague who disagreed with his end assessment.” (Mrs. Duijff)

Mrs. Duijff also pointed out that one of the most crucial pointers for teachers regarding the use of a performance measurement system is to be upfront and fair about their performance and possible career trajectories. This can be achieved by informing teachers at the start of their temporary contracts about the possibility of getting a contract extension at the school. Mr. Hazenveld also emphasized that in case teachers fail to meet certain goals, it will not mean that they will be heavily punished. The school leader will then examine why the teachers failed in achieving their goals and see if there is a plausible explanation for failing those goals. Mr. Hazenveld pointed out that he has only experienced a few cases in which a teacher did not agree with how he was evaluated:

“No, I mean, I am now almost twenty years in this position, and I think I have had around ten of those conversations, and none of them have been over the last few years.” (Mr. Hazenveld)

So, in general, the use of a performance measurement system is perceived to be fair by secondary school teachers in the experience of Mr. Hazenveld and Mrs. Duijff.

Mrs. Duijff indicated that there is a direct and an indirect goal of the performance measurement system used by Macropedius College. The direct goal is to improve the quality of the teachers. Subsequently, the pupils' development should also benefit by improving the teachers' quality. Therefore, the indirect goal of using a performance measurement system is to increase the test results. Mrs. Duijff expects the results to increase when the quality of the teachers improves. According to Mrs. Duijff, the focus used to be on optimizing the test results before she became a divisional leader. However, the test results are not as important anymore. Teachers also became opposed to the policy, which used to focus on test results only. Therefore, the focus shifted from improving the test results to improving the quality of the teachers when Mrs. Duijff became the divisional leader.

Mr. Hazenveld indicated what, in his opinion, the goal of using a performance measurement system at Zwijsen College is:

“Professionalism, create awareness, reflect, “am I (the teacher) doing those things right? Am I on the right track?”. Being forced to take a look at the mirror.” (Mr. Hazenveld)

The goal is then eventually two-folded. At first, the goal is to improve the development of the teacher. Second, the goal is to improve the test results of their pupils.

Performance measurement systems are perceived to be useful for two reasons, according to Mrs. Duijff. First, they provide the opportunity to improve the quality of the school. Second, they can help the school support a certain decision because the use of a performance measurement system makes things visible and understandable:

“What makes having those performance criteria so nice is that it provides you with certain arguments to explain to someone why you decided to give a teacher a contract extension or why you decided not to give a teacher a contract extension.” (Mrs. Duijff)

Mr. Hazenveld also believed that the use of a performance measurement system must, in particular, be seen as part of the development of a teacher and not necessarily to evaluate someone. It must be seen as an instrument to help a teacher to develop himself. That is also the

reason that Mr. Hazenveld thought as to why the use of a performance measurement system can be beneficial.

Lastly, Mr. Hazenveld pointed out that the Covid-19 situation also influenced how performance measurement systems were used over the last few years. Due to the Covid-19 situation, the evaluation cycle of three years has been extended to four years. Mr. Hazenveld also pointed out that there are some differences between teachers with a temporary contract and a permanent contract, as teachers with a temporary contract will be evaluated in just one year. Therefore, the evaluation of teachers with a temporary contract is more intense.

4.2.2 Rewards and punishments

Both school leaders acknowledged that there are some rewards and punishments attached to the use of a performance measurement system. So, when the performance of teachers is not of a reasonable level, based on the performance indicators, the teachers can expect some consequences:

“Look, when a teacher does not function properly, then he/she will be put in an evaluation cycle and we will go and sit down together in an attempt to see why he is not functioning properly.”
(Mrs. Duijff)

If teachers do not score well on the performance indicator and do not appear qualified for the job, it could ultimately lead to their resignation. However, on the contrary, if teachers perform excellent based on the performance indicators, they can also be rewarded for their performance:

“Yes, when you actually rise above your own job description, which is either within the LB, LC, or LD scale, then it will show that you are ready for the next step.” (Mr. Hazenveld)

So, Mr. Hazenveld indicated that when teachers perform well, they will be rewarded, which could result in a teacher receiving promotion.

Furthermore, it appeared that the teachers' salaries are not related to their performance. According to Mrs. Duijff, a teacher's salary cannot decrease unless he proposes to earn a lower salary himself:

“A teacher can say it himself as well: “you are right, I do not function good enough to be in an LD-scale, so you can downgrade my salary”, so when a teacher points that out, it is possible; otherwise the only option left is to fire him.” (Mrs. Duijff)

Besides, Mr. Hazenveld pointed out that only if a teacher performs extraordinary well and is unable to get promoted to a higher scale, it will be possible for a teacher to be rewarded through a bonus payment to show the school’s appreciation. Mrs. Duijff pointed out that when a teacher is performing well, he or she can also request to go to a higher scale. A teacher can then, for example, go from an LC scale to the LD scale, which pays more but also gives a teacher more responsibilities.

It is also important to point out that teachers can get punished when they are not performing well. Especially the teachers with a temporary contract can experience the possible punishments due to their bad performance. The contract of teachers with a temporary contract can, for example, not get extended when their performance is not good enough. On the contrary, teachers with a permanent contract have less to fear, as it is pointed out that it is complicated to fire teachers possessing a permanent contract:

“Teachers with a permanent contract will be in the evaluation cycle of three years. When they suddenly get bad scores, they will be put on a track to improve. When they fail to do so, we have to ask ourselves, “how bad is that?” as not all indicators are that important.” (Mr. Hazenveld)

So, the consequences for teachers with a temporary contract are different than for teachers with a permanent contract.

However, a bad performance review is not expected to affect a teacher's career trajectory severely. Mr. Hazenveld thought that when a teacher does not perform well, he will be able to get a new start at a different school without experiencing any adverse consequences from his earlier performance reviews. Mr. Hazenveld expected this based on his own experience in which he hired a new teacher that eventually turned out to have had bad performance reviews at a previous school.

4.2.3 Personal consequences

Mr. Hazenveld was convinced that the use of a performance measurement system does not lead to a bad sphere among teachers. Mrs. Duijff implied that this is especially the case for teachers with a permanent contract:

“No, because we do not have an evaluation cycle for teachers with a permanent contract. They have a development cycle. So they do not have to comply with any strict measures.” (Mrs. Duijff)

Besides, most teachers at Macropedius College with a temporary contract already know the possibilities for them in the future at Macropedius College. Nevertheless, it can still be a shock among the teachers when a teacher with a temporary contract has to leave because his or her contract will not be extended, even when his or her performance is of an excellent level.

Both school leaders were also convinced that the use of a performance measurement system does not result in a competitive environment among teachers:

“Of course you sometimes have, “Why does he get that (promotion), but I don’t?”, but to argue that it then means that there is a competition? No, I would not say that.” (Mr. Hazenveld)

It can lead to some friction among teachers. However, that does not mean that there is a competitive environment among teachers.

The two school leaders also indicated that the teachers continuously receive feedback based on their performance. Furthermore, teachers can follow any training they consider to be necessary for improving specific characteristics of their profession and subsequently improving their own quality. Besides, there is another essential factor in the evaluation process of a teacher, according to Mrs. Duijff:

“We, for example, also provide support for our colleagues by hiring an ambulant attendant or a care coordinator to join a specific team and support our teachers to help certain pupils.” (Mrs. Duijff)

Both schools also hire, if deemed necessary, so-called “teacher-coaches” to improve the quality of the teachers. Teacher-coaches are supposed to analyze the teachers and identify areas that can use some attention. The use of teacher-coaches should provide teachers with the ability to improve their quality as much as possible.

Both school leaders indicated that the use of a performance measurement system does not result in any stressful situations for teachers with a permanent contract. However, Mrs. Duijff and Mr. Hazenveld expected it to be different for teachers with a temporary contract:

“I do not establish that teachers experience it (performance measures) to be very stressful. No, I do not have that feeling. However, that does change when we talk about the new teachers because they will be evaluated within one year. Nevertheless, if they prove their worth and show that there is room for development, then there is nothing to worry about.” (Mr. Hazenveld)

At the same time, teachers with a temporary contract appear to be very motivated to perform as good as possible to ensure that their performance indicators show that they are doing a good job:

“By setting goals, they (the teachers) improve themselves, and most of them really want to improve as well, and they also see, “Hey, these are just points which allow me to improve myself, so I am really going to do something with it.”” (Mrs. Duijff)

According to Mrs. Duijff, not all teachers with a permanent contract are more motivated through the use of a performance measurement system. Some teachers need to be pushed to become motivated to improve themselves. However, Mr. Hazenveld was confident that the use of a performance measurement system motivates teachers to perform optimally, particularly those with the ambition to reach a higher scale. Besides, Mr. Hazenveld was also convinced that teachers do not experience it as if they are constantly being monitored.

5 Conclusion and discussion

Over the last few months, this research was performed in order to find an answer to the research question: *What is the influence of performance measurement systems on the behavior of Dutch secondary school teachers?* Six teachers and two school leaders were interviewed to answer this research question, divided over two secondary schools in the Netherlands.

5.1 Conclusion

The results of this research indicated that the use of performance measurement systems is not important in Dutch secondary schools and hence, does not significantly influence the behavior of Dutch secondary school teachers. The performance of teachers at both secondary schools is measured through the use of a form with indicators that the Inspectorate of Education partially determines. Nevertheless, the personal opinion of the school leaders can play a significant role in the evaluation of a teacher as well. Dutch secondary school teachers do not have the feeling that they are closely being monitored. Besides, they do not continuously receive feedback from the school leaders, even though the school leaders indicated that they provide teachers with feedback continuously. This is surprising to find since it is pointed out in the scientific literature that it is crucial for employees to receive feedback continuously to improve their qualities. Nevertheless, the use of performance measurement systems is perceived to be useful for teachers by both the teachers themselves and the school leaders. Given that the use of performance measurement systems can indicate if the teachers achieve a certain basic level and can make any aspects of a teacher's job visible that need to be improved. Consequently, the teachers can allocate their personal budgets to any training they deem necessary in an attempt to strengthen their weaker aspects, which became visible through the use of a performance measurement system. So, a performance measurement system ensures that the teachers have the possibility to use their budgets optimally.

Furthermore, it must be emphasized that no severe rewards or punishments are linked to a teacher's performance. Especially not to a teacher with a permanent contract, as is also pointed

out by the school leaders. The teachers have no reason to worry about their job, despite the use of performance measurement systems. In the scientific literature, it is illustrated that linking potential rewards to a good performance would lead to an effective performance measurement system and, in the end, would benefit the whole organization. Therefore, it is surprising that teachers are not necessarily (financially) rewarded for achieving a good performance. Moreover, the measurement-reward process model of Hopwood (1974) also indicates that it is important to link rewards to the performance measurement systems used. Linking the rewards to the performance measurement systems used should ensure that an individual's behavior (in this case, the behavior of a teacher) will move towards the behavior an organization (the school) wants to see from their employees to ensure that the organizational purposes will be achieved. However, as there are no rewards and punishments related to the performance measurement systems used in the Dutch secondary schools, the behavior of the teachers is not significantly influenced by the use of a performance measurement system. The fact that the goals of the schools and the teachers are not entirely aligned (also not after the use of a performance measurement system) is illustrated by the perceived importance of test scores. Although the school leaders indicate that test scores are important, the teachers indicated that they do not see test scores as one of their main goals. Moreover, the use of performance measurement systems does not have any significant personal consequences for teachers, as it does not cause any stress or competitiveness among teachers. Besides, it does not motivate teachers to perform optimally, despite the fact that the school leaders expected that using performance measurement systems would motivate teachers.

Throughout this research, it is essential to keep an eye on the fact that schools are part of the public sector. With the rise of NPM in the Netherlands and with the increasing importance of performance measurement systems over the years in the educational system in the Netherlands (McLaughlin et al., 2002; Hidding, 2009), it was expected that performance measurement systems would have a significant influence on the behavior of teachers. Besides, it was expected that performance measurement systems would be beneficial for the quality of the Dutch educational system. Furthermore, the OECD (2012) also indicated that the performance of teachers is

somehow linked to the teachers's salaries. However, as it turns out, the teachers' salaries are not directly related to their performance. Moreover, performance measurement systems do not seem to have a significant influence on the behavior of Dutch secondary school teachers. So, the use of performance measurement systems is entirely different in Dutch secondary schools, contrary to what was expected based on the literature. Additionally, it is unlikely that the rise of NPM and the increased usage of performance measurement systems have caused the goals of an individual (the teacher) and an organization (the school) to align. Therefore, it is doubtful if the use of performance measurement systems has been beneficial for the quality of the Dutch educational system.

Nevertheless, the interviews with the teachers have given some interesting insights into the use of performance measurement systems at secondary schools in the Netherlands. It became clear that how performance measurement systems are used in the Dutch educational system is not comparable to how they are used in the educational systems of the mainstream countries (as can be seen in *Appendix 1*). The personal consequences for teachers interviewed did also not appear to be as severe as is the case in the mainstream countries. Besides, Dutch secondary school teachers interviewed did not experience any severe personal consequences due to the use of a performance measurement system. However, how performance measurement systems are used in the Dutch educational system is somewhat comparable with how they are used in Finland. There are no strict performance measurement systems applicable to the Dutch secondary schools. Besides, there are no severe rewards or punishments attached to the use of performance measurement systems in the Dutch educational system, just as is the case in Finland (as can be seen in *Appendix 1*). According to the measurement-reward process model of Hopwood (1974), this is an important reason as well as to why the use of performance measurement systems does not significantly influence an individual's behavior.

So, as the measurement-reward process model indicates, an organization needs to ensure that the individual's goals are aligned with the goals of an organization. Otherwise, an organization might fail to achieve its original purposes. To ensure that the goals of an individual and an

organization are aligned, performance measurement systems need to be used and rewards need to be related to them. Although performance measurement systems were implemented in the Dutch educational system, there do not seem to be any direct rewards (or punishments) attached to the performance measurement systems. Besides, the current use of a performance measurement system does also not lead to any major personal consequences for the Dutch secondary school teachers. Therefore, it becomes clear that the behavior of teachers is currently not significantly affected. Consequently, it remains possible that there is some goal congruence between the Dutch secondary school teachers and the school itself, as is illustrated by the measurement-reward process model of Hopwood (1974).

5.2 Discussion

It is difficult to say if performance measurement systems are currently used in the right way when the goal is to optimize the quality of the Dutch educational system. However, according to the PISA scores, the quality of the Dutch educational system has not improved over the last few decades. Therefore, something needs to change within the Dutch educational system. Teachers are currently also not pushed by the schools via performance measurement systems to ensure they perform as best as possible, as there are no direct rewards (or punishments) attached to a performance measurement system. In an attempt to turn the trend of decreasing quality around, it could be interesting to see what happens with the Dutch quality of education if real consequences are attached to a teacher's performance. Teachers then have an incentive to ensure that they are performing optimally. However, this does not necessarily mean that the quality will improve, as countries such as the UK and the US use a strict performance measurement system and are not among the top 10 countries in the world regarding the quality of their educational system. On the contrary, it may be better to remove any solid top-down control mechanisms and see if the quality of the Dutch educational system will improve. Finland does not have any solid top-down control mechanisms and is, after all, among the top 10 performing countries in the world regarding the quality of their educational system (as can be seen in *Appendix 1*). Nevertheless, it is safe to say that performance measurement systems do

not significantly influence the behavior of secondary school teachers in the Netherlands at this moment. However, it is difficult to determine whether that is a good or a bad thing.

It is also important to point out some of the limitations of this research. To begin with, this research is conducted at only two schools in the Netherlands. As has already been pointed out in chapter 2, each school is free to determine how it wants to evaluate its teachers. Therefore, it will not be surprising if other schools measure their teachers' performance differently. Consequently, other schools in the Netherlands might use a performance measurement system in a particular way that does influence the behavior of teachers. Therefore, the results of this research are not very generalizable. Another important limitation is that the participants interviewed for this research were all Dutch. Because their native language is Dutch (as well as the native language of the author of this research), it was decided to conduct the interviews in Dutch. However, after the interviews were transcribed and put into Atlas.TI, the coding progress needed to be in English again. Besides, any quotes added to this research also needed to be translated from Dutch back to English. Therefore, there might have been a slight loss of information due to translation errors or a wrongful interpretation even though this process was conducted carefully. Another limitation is that the interview with Mr. Hazenveld got interrupted twice due to a medical emergency of one of the pupils at Zwijsen College. Due to this interruption, some information is likely to have been lost. However, I believe this information loss is not crucial for this research.

In my opinion, this research also brings some interesting directions for future research to light. During this research, it became clear that there can be some significant differences between teachers with a permanent contract and teachers with a temporary contract. Teachers with a temporary contract might experience the use of a performance measurement system completely differently than teachers with a permanent contract, as, for example, the temporary contract of a teacher can easily not be extended. This means that a teacher with a temporary contract has a big incentive to ensure his performance is of a high level. He still has to earn a permanent contract after all. Therefore, in future research, it will be interesting to make a clear distinction between

teachers with a temporary contract and teachers with a permanent contract. Furthermore, it would be interesting to investigate if teachers who indicate to be influenced by the use of a strict performance measurement system might achieve better results than teachers whose performance is measured by a loose performance measurement system. This could then indicate if it would be beneficial for the Dutch educational system to introduce strict performance measurement systems to evaluate secondary school teachers. Lastly, it will be interesting to conduct this research on a bigger scale. As has been mentioned, each secondary school has the freedom to evaluate the performance of their teachers themselves. Therefore, it would be interesting to see if the results of this research would align with a larger number of schools throughout the Netherlands, despite the possibility that other schools might use different performance measurement systems.

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7 Appendix

7.1 Appendix 1 International spectrum

Comparing countries

In an attempt to illustrate how the use of performance measurement systems can influence the behavior of teachers, it is important to acknowledge that there are various ways to use performance measurement systems in the educational system. Based on the scientific literature, it becomes clear that there are some interesting differences between countries regarding the use of performance measurement systems and how they might influence the behavior of teachers. On one side of the spectrum are the more mainstream countries, and on the other side of the spectrum are countries such as Finland. Therefore, the use of performance measurement systems in the educational system of the mainstream countries and Finland will be analyzed and compared. Given that this research will be performed at secondary schools in the Netherlands, the use of performance measurement systems in the Dutch educational system will also be analyzed.

The mainstream countries

The US and UK perspectives can be seen as part of the global mainstream regarding the quality evaluation in education. It is known that they are using competition, prescribed curricula and standardized testing to try to achieve their goals. Besides, both countries also rely heavily on numbers and data (Kauko, Varjo, & Pitkänen, 2021). However, this does not mean that their educational system is also among the top-performing countries of the world, as the educational system of both countries is not among the top 10 of the world (FactsMaps, n.d.).

To understand how a performance measurement system is implemented in a mainstream country, a closer look will be taken on the US perspective. Therefore, we must go back to 2001, when the NCLB law was accepted. The goal of the law was to make schools accountable for the level of pupils' achievement each year. Therefore, it required all pupils to achieve a certain level in reading and mathematics (Husband & Hunt, 2015). The implementation of the NCLB law can

be seen as an embracement of the NPM's focus on performance measurement and accountability as effective means for improving public service quality (Patrick & French, 2011). Four main components are embedded in the NCLB policy. First, there is accountability. Schools are responsible for a sufficient amount of progress each year. This means that schools should achieve the AYP (Adequate Yearly Progress), which aims to ensure that every student becomes proficient in reading and mathematics (Husband & Hunt, 2015). If a school is unable to achieve the AYP for five years in a row, restrictions would be imposed on the school. The second component is providing more flexibility for schools, school districts and states regarding the use of federal funds. This should provide schools with greater flexibility regarding their improvement as long as they meet the requirements. The third component is the option for people from a disadvantaged background to send their children to a better-performing school. This component should provide the parents with the opportunity to choose between different schools. The last component is the emphasis that is being put on specific teaching methods that have already proven to work. This means that all school improvement plans must be partially based on teaching strategies that have already been proven to work in experiments. Due to the introduction of NCLB, states and school districts felt that their teaching autonomy was under pressure by federal law (Husband & Hunt, 2015). Besides, teachers were evaluated based on pupils' performance (Close, Amrein-Beardsley, & Collins, 2018). Therefore, different states in the US started using the so-called Value-Added Models (VAMs). This meant that teacher performance got measured based on the changing test scores of their pupils.

Although the spirit of NCLB was right (high standards, accountability and closing the achievement gap), it ultimately fell short in practice (Korte, 2015). The NCLB law appeared to be too much focused on testing. Furthermore, it was also time to shrink the federal government's role again. Therefore, NCLB was replaced by the Every Student Succeeds Act (ESSA). Consequently, states and school districts became empowered to make their own decisions again. Besides, schools are not punished if too many pupils fail the reading and math tests (Camera, 2015). The teacher evaluation methods also started to change. The influence of VAMs began to decrease and subsequently, the number of states that were using them began to decline as well.

The most crucial change, in general, was that the rhetoric of a teacher's evaluation started to change. The language that teachers should be held accountable for the lack of their value-added effects began to change towards providing teachers with data to allow them to improve themselves (Close et al., 2018). One of the most important recommendations of the report by Close et al. (2018) is to ensure that the teachers' evaluation system relies on a balanced approach of multiple measures without assigning too much weight to one specific item.

Nevertheless, the scores of pupils still appear to be one of the most critical factors of a teacher's evaluation in a mainstream country. To see what the consequences are for teachers, a closer look has been taken at another mainstream country: the UK. In the UK, they make use of the performance-related pay concept. Some specific expectations arose with the introduction of performance-related pay in the educational system of the UK. The introduction of performance-related pay is, for example, supposed to attract more graduates to the teaching profession. It is also expected that performance-related pay will make it possible to offer teachers greater rewards and motivate people to start working in the teaching profession (Forrester, 2011). However, there is a lot of debate about the usefulness of the performance-related pay concept. A significant problem with the performance-related pay concept is that non-measurable work is not taken into account at all. Obviously, this does not mean that the non-measurable work of teachers is not important (Murray, 2012). Nevertheless, the English government implemented the performance-related pay concept in 2014. The teachers' salaries now became dependent on appraisal outcomes and meeting the school's specific standards (edapt, n.d.). Even after implementing this system, there still was a lot of debate about the usefulness of the performance-related pay concept. It is argued that the performance-related pay concept does not improve the school's performance (NEU, 2019). It is also suggested that the quality of teaching cannot be appropriately measured, quantified or ranked by the performance-related pay concept. Furthermore, the end of pay progression for the teachers based on the years that someone is serving makes teaching a less attractive profession to work in (NEU, 2019). Teaching unions even stated that the implementation of the performance-related pay concept for teachers has failed,

given that it created needless additional workload and that it led to an increase in the shortage of teachers (tes magazine, 2020).

The use of performance measurement systems in the mainstream countries also had some personal consequences for the behavior of teachers. First of all, a very competitive environment has developed among teachers. This competitive environment might not be optimal for the teaching profession (Ball, 2003). Another consequence of how performance measurement systems are used in the mainstream countries is that teaching could become like a panopticon. A panopticon is a design which is developed in the nineteenth century. It was a prison in which a central tower allowed the guards to look into the prison without the prisoners knowing if they were being looked at. Through this panopticon, everything could become visible. Consequently, the prisoners believed that everything they did became visible (Sia, Tang, Soh, & Boh, 2002). When looking at the teachers' profession, everything a teacher does would become visible to school management, leading to many doubts among the teachers themselves. Teachers started wondering about every decision they made and started doubting if what they were doing was the right thing to do (Ball, 2003). Consequently, this caused stress among teachers as well. The consequences of the panopticon in education became, in particular, visible through secondary schools that were under special measures from Ofsted (The Office for Standards in Education, Children's Services and Skills) and were obligated to comply with the regime of Ofsted (Perryman, 2006). When schools were obligated to comply with the regime of Ofsted, it was expected of schools to meet specific criteria that would allow them to grow towards a certain standard that would enable them to leave this special measures area again. Therefore, schools were obligated to pass a specific inspection, and those schools would be subjected to a relatively large amount of inspections. Consequently, those schools were expected to standardize their teaching methods according to what the inspectors wanted to see. This then took the artistry out of the art that teaching actually should be (Perryman, 2006). Due to the NCLB law in the US, the same type of consequences was also applicable to the behavior of US secondary school teachers. Teachers in the US became more competitive as well. Besides, teachers also became under tremendous pressure to ensure their pupils would achieve a certain threshold (Husband & Hunt, 2015).

Consequently, teachers were experiencing a lot of stress and even became demotivated (Kim & Holzer, 2016).

Finland

The Finnish perspective can be seen on the other side of the spectrum. Finland has an entirely different way of approaching its educational system compared to the mainstream perspective. Finland does not use any large-scale national tests or any form of school rankings (Kauko et al., 2021). There are also no final exams at the end of comprehensive school (Tarhan, Karaman, Kempainen, & Aerila, 2019). Instead, Finland has great confidence in its teachers' professional capacity. Finland does also not have an Inspectorate of Education (Tarhan et al., 2019). They use three different evaluation methods to ensure the quality of comprehensive schools in Finland. Finland makes use of international testing, national external evaluation and local self-evaluation. It is important to point out that the data they collected on a national level is only meant to assist the development of local quality processes and provide external evaluation data. The data is not meant to control the education providers at all (Kauko et al., 2021). Therefore, the Finnish educational system does not have solid top-down quality control mechanisms. Instead, teachers are mainly evaluated based on face-to-face conversations with their superiors. Nevertheless, Finnish teachers can be assessed indirectly on their pupils' test scores. However, the main reason to indirectly evaluate the teachers on the pupils' test scores is that it is expected of Finnish teachers to see if someone needs additional support in a particular course (Tarhan et al., 2019).

Teachers' salaries in Finland are being negotiated on a national level. However, this does not mean that every teacher earns the same salary, as a teacher's salary depends on their position (Paronen & Lappi, 2018). There are, for example, some significant differences between primary and secondary school teachers (Webb, et al., 2004). Besides, a teacher's salary also depends on his or her work experience and level of professionalism. Furthermore, a teacher can receive a bonus, although it is not very common for a teacher to receive a bonus (Paronen & Lappi, 2018).

Teaching is a very popular profession among high school graduates in Finland. Only a small group of the applicants will be able to become a teacher, given that only 10% of the applicants are accepted into the training program. Therefore, only the most motivated prospects will make it into this program (Tarhan et al., 2019). Furthermore, teachers in the Finnish educational system are expected to be ready to reflect on the quality of their work at all time. Teachers in Finland also appear to be willing to attend professional development activities and programs in their own time (Tarhan et al., 2019). The teachers' evaluation in Finland is also more group-based, reflective and participatory. The aim is to create professional learning communities among teachers. Therefore, it is also unlikely that there will be a lot of competition among teachers. Superiors and teachers may also have individual development dialogues. The individual development dialogues will focus entirely on the work delivered by the teacher, the working conditions, and the teacher's development (Tarhan et al., 2019).

So, it becomes clear that there are considerable differences between the mainstream countries and Finland. In the mainstream countries, there used to be a culture in which teachers were under pressure to ensure that their pupils would achieve certain measurable results. In Finland, there are no large-scale national tests on which the pupils are being measured. A teacher's performance in Finland is not necessarily linked to the performance of pupils. Furthermore, it appears that schools and teachers in Finland have an intrinsic motivation to make sure that they perform as well as possible. This is illustrated by the fact that they are, for example, developing professional learning communities to optimize their performance. Besides, it does not appear to be necessary to have an Inspectorate of Education or a strict performance measurement system on a national level, as the educational system of Finland is also among the top 10 educational systems of the world (FactsMaps, n.d.).

The Netherlands

When the use and implementation of performance measurement systems in the Dutch educational system is analyzed, it becomes clear that the “Inspectie van het Onderwijs” (Inspectorate of Education) has an essential role. The Inspectorate of Education's primary goal is

to ensure that the education the schools provide is of sufficient quality. They also want to make sure that schools keep trying to improve themselves (Inspectie van het Onderwijs, 2019). The Inspectorate of Education performs at least every four years a detailed investigation at every school in the Netherlands. This investigation aims to clarify which areas schools could improve themselves (Inspectie van het Onderwijs, 2019). The Inspectorate of Education also performs an analysis of the yearly achievements of every school. The Inspectorate of Education then looks at the education results, the financial situation, and other signals about the school's current condition. If there appear to be any worrying signs, the Inspectorate of Education might be inclined to start an investigation (Inspectie van het Onderwijs, 2019). The Inspectorate of Education uses four different indicators to determine each year if the education results of secondary schools are of sufficient quality. They look at (1) the position of pupils in year three of their education compared to the advice the pupils got at the end of their primary school, (2) the percentage of pupils that did not fail their class in year one or two, (3) the percentage of pupils that did not fail their class from year three onwards per educational level, and (4) the average grade of all the central exams per educational level (Inspectie van het Onderwijs, 2020). This information also becomes publicly available. Although there does not appear to be a general school ranking, everyone can compare the schools' quality (Inspectorate of Education, n.d.). Therefore, secondary schools are incentivized to ensure that their quality of education is of a sufficient level.

Schools in the Netherlands have more tasks that are not necessarily related to the indicators mentioned above. According to "De Staat van het Onderwijs" (2020), the Dutch schools have four core tasks (kerntaken) which are (1) allocation (allocatie), which means educating pupils to enter the job market, (2) socialization (socialisatie), which means providing the pupils with the opportunity to develop their social skills, (3) selection and equal opportunities (selectie en gelijke kansen), which means providing pupils with a proper educational environment which matches their skills and (4) qualification (kwalificatie), which means making sure that everyone can develop their skills and knowledge (Inspectie van het Onderwijs, 2020). The teachers are responsible for ensuring that the pupils can achieve all those tasks. To ensure the teachers will

behave in accordance with the goals of the schools, the schools themselves are responsible for the appraisal of their own internal teachers (Scheerens, Ehren, Slegers, & De Leeuw, 2012). Teachers are not being evaluated by an external party, not even by the “Inspectie van het Onderwijs” (Scheerens et al., 2012). There is also no national regulated framework in the Netherlands for the evaluation of teachers.

When we compare the educational system of the countries analyzed above, it appears that the Netherlands is somewhat comparable to the mainstream countries. There is an Inspectorate of Education in the Netherlands, just as is the case in the mainstream countries. The Inspectorate of Education is responsible for ensuring that the yearly goals are being achieved and that the quality of education provided by schools is high enough. Besides, pupils in the Netherlands are also obligated to take certain standardized tests (for example, the final exams at the end of secondary school). This is entirely the opposite of the Finnish perspective. In Finland, there are no standardized tests on a national level that have severe consequences for the schools, as there is also no Inspectorate of Education in Finland.

However, when looking specifically at how teachers are being evaluated in the different countries, it seems that the Dutch perspective also has some similarities with the Finnish perspective. Like the Finnish perspective, there does not appear to be a national regulated framework to evaluate a teacher. It seems that every school in the Netherlands has the freedom to determine how it wants to evaluate its teachers. Although there are standardized tests in the Netherlands (such as the central exams at the end of secondary school) that are mandatory for everyone to take and hence, provide an easy measure for schools to evaluate teachers on, as is the case in the mainstream countries.

It also remains a bit unclear if any rewards or punishments are attached to the performance of secondary school teachers in the Netherlands. According to the OECD (2012), outstanding teacher performance is an important criteria for decisions regarding the position of the teacher on the base salary scale. Therefore, a teacher’s salary will increase when a teacher performs well.

However, as mentioned already, there does not seem to be a national framework on which to base the evaluation of Dutch secondary school teachers. Nevertheless, the Inspectorate of Education in the Netherlands demands that the number of pupils to pass that test will be of a certain percentage. Consequently, if schools fail to achieve that threshold, they could be investigated by the Dutch Inspectorate of Education. Furthermore, it will be publicly known if a school fails to achieve a specific score. This illustrates the importance for schools to ensure that they will meet the specific score of the indicators set by the Dutch Inspectorate of Education. Therefore, it will not be surprising if consequences are attached to the test scores that the pupils of a teacher achieve. A teacher then might become unable to focus on, for example, the social development of their pupils. Consequently, this might also take the artistry out of the art that teaching should be and be demotivating for the Dutch secondary school teachers.

Results of how the Netherlands fits in the international spectrum based on the interviews conducted

Before the interviews were conducted, it was unclear how the Dutch educational system would fit in the international spectrum regarding the use of performance measurement systems. The scientific literature could not clearly illustrate how the performance of Dutch secondary school teachers was exactly measured, as each secondary school in the Netherlands is free to determine how they want to measure their teachers' performance. When looking at how performance measurement systems at Macropedius College and Zwijsen College were implemented, it became clear that how performance measurement systems were implemented was not comparable with the more mainstream countries. Test scores of pupils did not appear to be very important when measuring a teacher's performance. So test scores are not at the core of the performance measurement systems used at Dutch secondary schools. Besides, when analyzing the rewards and punishments attached to the performance measurement systems, it became clear that the performance-related pay concept is not used in the Dutch educational system. Generally, a teacher's salary is not directly linked to their performance. So, the link between the salary of a teacher and his or her performance is entirely different compared to the UK perspective. Furthermore, a teacher's job is also not in jeopardy due to a bad performance review, as was the

case in the US during the NCLB period. Furthermore, the personal consequences for Dutch secondary school teachers also appeared to be completely different compared to those mainstream countries. The teachers interviewed generally did not experience any form of competitiveness, stress, or demotivation through the use of performance measurement systems by Macropedius College and Zwijsen College. Besides, teachers were also asked questions about if they feel that they are watched all the time, as is the case in the UK. However, most of them did not have the idea that they are watched by their superiors at all. So, there did not appear to be any form of a panopticon at the Dutch secondary schools.

The fact that the Dutch perspective is not comparable to the more mainstream perspectives does not necessarily mean that it is similar to the Finnish perspective. There are some significant differences. In the Netherlands, test scores play a role in the performance measurement of a teacher (even if it is not necessarily a major role). Besides, the indicators used in the performance measurement of teachers in the Netherlands are partially chosen by the Inspectorate of Education. Despite these differences between the Netherlands and Finland in the evaluation of a teacher, there are some important similarities as well. Firstly, the rewards and punishments attached to the use of performance measurement systems are similar. Secondly, just as in Finland, teachers are being evaluated by holding individual face-to-face conversations. Besides, teachers' salaries in the Netherlands are not really dependent on their performance. Instead, there are fixed salaries in the Netherlands that depend on which scale a teacher is operating in and the years of experience a teacher has, which is comparable with the system used in Finland.

7.2 Appendix 2 Tree diagram

Concept:	Dimensions:	Source(s):	Indicators:	Source(s):
Influence of performance measurement systems	Implementation process	(Waggoner et al., 1999; Owais & Kiss, 2020)	Type of performance measurement system	(Bourne & Neely, 2003; Propper & Wilson, 2003)
			Employee involvement	(Tung et al., 2011; Ukko et al., 2009; Sing & Twalo, 2015)
			Fair reward system	(Ukko et al., 2009)
			The goal of the performance measurement system	(Ghalayini & Noble, 1996; Jääskeläinen et al., 2015)
			Usefulness	(Propper & Wilson, 2003; Jääskeläinen et al., 2015)
	Rewards and punishments	(Tung et al., 2011; Neely et al., 1995; Hopwood, 1974)	Performance-related pay	(Booth & Frank, 1999; Perry et al., 2013; Forrester, 2011)

			Job in jeopardy	(Jääskeläinen, Lönnqvist, & Kulmala, 2015)
			Career trajectory	(Forrester, 2011; Mishken & Juhasz, 2008)
	Personal consequences	(Bourne et al., 2002; Ukko et al., 2008)	Competitiveness	(Tung et al., 2011; Ball, 2003; Forrester, 2011)
			Evaluation	(Kim & Holzer, 2016; Singh & Twalo, 2015)
			Stress	(Kim & Holzer, 2016)
			(De)motivation	(Kim & Holzer, 2016; Idowu, 2017)

7.3 Appendix 3 Interview guide Dutch

In deze interview guide is een onderscheid gemaakt tussen vragen specifiek voor docenten en vragen specifiek voor leidinggevendenden. De vragen specifiek voor docenten zijn aangegeven met een (D). De vragen specifiek voor een leidinggevende zijn aangegeven met een (L).

Informatie vooraf:

Ik wil je alvast bedanken voor je bijdrage aan dit onderzoek. In dit interview zullen er vragen worden gesteld over de criteria waarop je wordt beoordeeld en de invloed daarvan op jezelf. Het gaat in dit geval dus om je eigen persoonlijke ervaringen met het gebruik van beoordelingscriteria. Er zijn dan ook geen foute antwoorden.

Introductie:

1. Kan je wat over jezelf vertellen?
 - 1a. Wie ben je precies?
 - 1b. Wat zijn je werkzaamheden?
 - 1c. Hoe lang ben je al werkzaam bij deze school?
 - 1d. Hoe lang zit je al in het vak?
 - 1e. Ben je in het bezit van een vast of tijdelijk contract?

Implementatie van beoordelingscriteria:

2. Wat is volgens jou het doel van de school?
3. Wat zijn je persoonlijke doelen als leidinggevende? (L)
 3. Wat zijn je persoonlijke doelen als docent? (D)
4. Hoe word je beoordeeld als leidinggevende? (L)

5. Wat is je rol, als leidinggevende, in het beoordelingsproces van docenten? (L)
 6. Wat zijn je verwachtingen van de docenten? (L)
 6. Wat wordt er van je verwacht als docent? (D)
 7. Wat zijn in jouw optiek de persoonlijke doelen die een docent moet nastreven? (L)
 8. Hoe worden de docenten precies beoordeeld? (L)
 - 8a. Hoe worden de doelen van docenten precies gemeten? (L)
 - 8b. Krijgt een docent door heel het jaar heen feedback? (L)
 8. Hoe word je precies beoordeeld? (D)
 - 8a. Hoe worden je doelen gemeten? (D)
 - 8b. Krijg je door het heel het jaar heen feedback? (D)
 9. Heeft een docent inspraak in het beoordelingsproces? (L)
 9. Heb je zelf inspraak gehad in je beoordelingsproces? (D)
 10. In hoeverre heb je het idee dat het beoordelingsproces van een docent een eerlijk proces is? (L)
 10. In hoeverre heb je het idee dat het huidige beoordelingsproces een eerlijk proces is voor jou als docent? (D)
 11. In hoeverre heb je het idee dat een docent het huidige beoordelingsproces als een eerlijk proces ervaart? (L)
 12. Wat is in jouw optiek precies het doel van het meten van de prestaties van de docenten door middel van de eerdergenoemde beoordelingscriteria? (L)
 12. Wat is volgens jou precies het doel van het meten van jouw prestaties door middel van de eerdergenoemde beoordelingscriteria? (D)
 13. Krijgt een docent door de werkgever training aangeboden om zijn of haar eigen prestaties als docent te verbeteren? (L)
-

13. Krijg je door je werkgever training aangeboden om je eigen prestaties te verbeteren?
(D)

De gevolgen van het wel of niet voldoen aan de beoordelingscriteria:

14. Wat zijn precies de gevolgen voor de docenten als ze wel of niet voldoen aan de beoordelingscriteria? (L)

14a. Is het wel of niet voldoen aan de beoordelingscriteria verbonden aan het salaris van de docenten? (L)

14b. Denk je dat het behalen van de beoordelingscriteria gevolgen heeft voor het verdere verloop van de carrière van docenten? (L)

14c. Denk je dat de docenten zich druk maken over zijn/haar eigen baan wanneer ze bepaalde beoordelingscriteria niet weten te behalen? (L)

14. Wat zijn precies de gevolgen van het wel of niet voldoen aan de beoordelingscriteria? (D)

14a. Is het wel of niet voldoen aan de beoordelingscriteria verbonden aan je salaris? (D)

14b. Denk je dat het behalen van beoordelingscriteria gevolgen heeft voor het verdere verloop van je carrière als docent? (D)

14c. Maak je je ooit druk om de gevolgen voor je huidige baan als docent wanneer je bepaalde beoordelingscriteria niet weet te behalen? (D)

De persoonlijke gevolgen van het gebruik van beoordelingscriteria:

15. In hoeverre heb je het idee dat het moeten voldoen aan bepaalde beoordelingscriteria van invloed is op de sfeer binnen de school onder het personeel?

15a. Heb je het idee dat beoordelingscriteria leiden tot een competitieve omgeving?

16. Wat is je persoonlijke mening over het gebruik van beoordelingscriteria?

16a. Vind je het gebruik van beoordelingscriteria nuttig?

17. In hoeverre heb je het idee dat het streven naar het voldoen van de beoordelingscriteria gevolgen heeft voor het gedrag van docenten? (L)

17a. Denk je dat docenten stress ervaren doordat ze aan bepaalde beoordelingscriteria moeten voldoen? (L)

17b. Heb je het idee dat het gebruik van beoordelingscriteria ertoe leidt dat de docenten het gevoel hebben dat ze constant in de gaten worden gehouden of ze wel of niet de doelen behalen? (L)

17c. Denk je dat de beoordelingscriteria de docenten motiveren om optimaal te presteren? (L)

17. In hoeverre heb je het idee dat het streven naar het voldoen van de beoordelingscriteria gevolgen heeft voor je eigen gedrag? (D)

17a. Ervaar je stress doordat je aan bepaalde beoordelingscriteria moet voldoen? (D)

17b. Heb je het idee dat het gebruik van beoordelingscriteria ertoe leidt dat je constant in de gaten wordt gehouden of je wel of niet je doelen weet te behalen? (D)

17c. Motiveren de beoordelingscriteria je om optimaal te presteren? (D)

Bedankt voor je antwoorden. Zijn er nog dingen die je zou willen toevoegen?

7.4 Appendix 4 Interview guide English

In this interview guide, a distinction is made between questions that are asked explicitly to teachers and questions that are specifically asked to school leaders. The questions specifically asked to teachers are indicated with a (D). The questions specifically asked to school leaders are indicated with an (L)

Information upfront:

I want to already thank you for your contribution to this research. In this research, questions will be asked regarding the criteria used to evaluate your performance and the influence it has on yourself. In this case, it is about your own personal experiences being subjected to the use of a performance measurement system. There are no wrong answers.

Introduction:

1. Can you tell something about yourself?
 - 1a. Who are you exactly?
 - 1b. What does your job contain?
 - 1c. How long have you been working at this school?
 - 1d. For how long have you been a teacher?
 - 1e. Are you in the possession of a permanent or temporary contract?

Implementation of performance measurement systems:

2. What is, according to you, the goal of the school?
3. What are your personal goals as a school leader? (L)
 3. What are your personal goals as a teacher? (D)
4. How is your performance measured as a school leader? (L)

5. What is your role, as a school leader, in the performance measurement process of teachers? (L)
 6. What are you expecting from the teachers? (L)
 6. What is being expected of you as a teacher? (D)
 7. What do you think are the personal goals a teacher should want to achieve? (L)
 8. How is the performance of teachers exactly measured? (L)
 - 8a. How are the goals of teachers exactly measured? (L)
 - 8b. Does a teacher receive feedback continuously across the year? (L)
 8. How is your performance exactly measured? (D)
 - 8a. How are your goals measured? (D)
 - 8b. Do you receive feedback continuously across the year? (D)
 9. Is a teacher involved in the performance measurement process? (L)
 9. Have you been involved in the performance measurement process? (D)
 10. To what extent do you think that the performance measurement process of a teacher is a fair process? (L)
 10. To what extent do you think that the performance measurement process is a fair process, for you as a teacher? (D)
 11. To what extent do you think that a teacher perceives the current performance measurement process as a fair process? (L)
 12. What is in your opinion exactly the goal of measuring the performance of teachers through the use of the aforementioned performance measures? (L)
 12. What is in your opinion exactly the goal of measuring your performance through the use of the aforementioned performance measures? (D)
 13. Does a teacher get any training offered by the employer in an attempt to improve his or her own performance as a teacher? (L)
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13. Do you get any training offered by your employer in an attempt to improve your own performance? (D)

The consequences attached to the achievement of performance measures:

14. What are exactly the consequences for teachers when they succeed or fail to achieve the performance measures? (L)

14a. Is the salary of a teacher related to the achievement of performance measures? (L)

14b. Do you think the career trajectory of a teacher is influenced when a teacher is able to achieve the performance measures? (L)

14c. Do you think that teachers have to worry about their own job if they fail to achieve certain performance measures? (L)

14. What are exactly the consequences when you succeed or fail to achieve the performance measures? (D)

14a. Is your salary related to the achievement of performance measures? (D)

14b. Do you think the achievement of performance measures has any influence on your career trajectory as a teacher? (D)

14c. Do you ever worry about the consequences for your own job as a teacher when you fail to achieve certain performance measures? (D)

The personal consequences attached to the use of performance measures:

15. To what extent do you think that the need to comply with certain performance measures has an influence on the sphere within the school among personnel?

15a. Do you think that performance measures lead to a competitive environment?

16. What is your personal opinion regarding the use of performance measures?

16a. Do you think the use of performance measures is useful?

17. To what extent do you think that the ambition of teachers to achieve the performance measures is influencing the behavior of teachers? (L)

17a. Do you think that teachers experience stress because of the need to comply with certain performance measures? (L)

17b. Do you think that the use of performance measures leads to teachers having the idea that they are constantly being watched if they are able to achieve the goals? (L)

17c. Do you think that performance measures motivate teachers to perform optimally? (L)

17. To what extent do you think your ambition to achieve the performance measures is influencing your behavior? (D)

17a. Do you experience stress because you need to comply with certain performance measures? (D)

17b. Do you think that the use of performance measures leads to you constantly being watched if you are able to achieve your goals? (D)

17c. Do the performance measures motivate you to perform optimally? (D)

Thank you for your answers. Is there any thing you would like to add?

7.5 Appendix 5 Overview interviews

Respondent	Duration of the interview	Function	Date Interview
Macropedius College			
Linda Duijff	53 minutes	Divisional leader HAVO	20-05-2022
Debby	50 minutes	Teacher English (onderbouw)	31-05-2022
Ingrid Goossens	45 minutes	Teacher English (VWO)	01-06-2022
Luuk van de Weijer	51 minutes	Teacher Economics (bovenbouw)	02-06-2022
Zwijzen College			
Carlo Hazenveld	56 minutes	Team leader year 1 and year 2	23-05-2022
Respondent A	49 minutes	Teacher English (VWO)	02-06-2022
Frans van der Linden	47 minutes	Teacher Mathematics (HAVO and VWO, bovenbouw)	03-06-2022
Jesper Bexkens	51 minutes	Teacher French (HAVO and VWO, onderbouw)	03-06-2022