Building High Performing Schools: A Case Study

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Received: September 17, 2024	Accepted: October 26, 2024	Online Published: March 19, 2025
doi:10.5539/ies.v18n2p77	URL: https://doi.org/10.5539/ies.v18n2p77	

Abstract

It has long been recognized that education plays a crucial role in the development of a nation and its people. Therefore, it is logical that there is much interest in increasing the quality of the education system. Schools are a significant representative of this system, and in recent years, there has been growing attention to the concept of the high-performance school. These schools play a special role in cultivating an environment with the best teachers that challenge and develop students both academically and socially, promoting excellence. This article specifically focuses on the question of how the internal organization and management of a school can be elevated to the level of high-performance using a quality improvement framework. After identifying from the literature a potentially suitable framework for the transition of a school to the high-performance level, we applied this framework to a case school using a questionnaire and semi-structured interviews to collect data. Finding is that the selected high-performance level and guide them in the right direction towards excellence, by providing practical points for improvement.

Keywords: high performance school, HPO, HPS, quality, school management

1. Introduction

It has long been recognized that the economic growth, prosperity, and development of a nation are inextricably linked to the strength of its human capital. The World Bank states that more than sixty percent of a country's wealth is directly attributable to its human capital (Gauthier, 2018). This human capital is cultivated within the country's education systems (Alemu, 2023; Sfakianaki, 2019; Weto et al., 2020). Educational institutions play an indispensable role in the education system: they generate new knowledge, develop new technologies, produce graduates who are well-prepared for the labor market, instill social values, encourage international involvement, and promote critical thinking (Marginson et al., 2023; Vermeulen et al., 2022; Williams, 2018). Research shows that countries with higher educational outcomes experienced faster economic growth, because of the improved productivity and ability of a well-educated workforce to perform high-quality work, thereby boosting economic output and the country's global competitiveness (Hanushek & Woessmann, 2012). Thus, the strength, vitality, and well-being of a country's economy and society are largely dependent on the quality of its schools (Hill et al., 2016; Subaidi et al., 2023). The quality of education delivered by these schools is therefore a crucial predictor of a country's future success (Pandla & Gupta, 2020). Moreover, education promotes social development by instilling values such as equality, tolerance, and social responsibility.

High-performance schools (HPS) provide an environment that challenges students and promotes excellence. These schools typically have superior resources, highly qualified teachers, and rigorous curricula that prepare students to excel both academically and socially. HPS have a clear vision of the future of education and their place within it, translating this into clear ambitions and concrete goals; they place great emphasis on quality assurance, professionalization, and development of their organization and staff (teachers, support staff, and management); they ensure a safe working and learning environment; they empower and equip their teachers with what they need to teach students; they have management that focuses less on administrative control and accountability and more on coaching and stimulating staff , their students are more likely to innovate, and they promote inclusivity and greater social mobility (Bell & Cordingley, 2014; Chetty et al., 2014; Education Council, 2024; Reardon, 2013; Samad et al., 2014; Schleicher, 2018).

Investing in education, particularly in HPS, should clearly be a top priority, as this will yield significant returns in the form of a capable, innovative, and socially cohesive workforce able to drive national progress and global competitiveness (Hazelkorn et al., 2018; Ng & Chan, 2008). To make educational investments as effective as possible, it is crucial that frameworks are available to actually create the HPS. In our research, we:

- 1) Firstly, explore whether such holistic frameworks (i.e., considering various aspects of internal organization and management) are available in the literature, and if so, select one for our research.
- 2) Secondly, apply the selected framework in a case study school to evaluate whether the framework is suitable for creating an HPS.
- 3) Thirdly, analyze how the framework worked at the school and whether the school experienced higher quality and organizational performance.

In our research, we specifically focus on how the internal organization and management of a school can be brought to the level of an HPS (Keeves et al., 2005). There is an abundance of literature that deals with the quality of education and teaching. However, there is much less literature on what and how the internal organization of a school needs to be improved to not only make the school an effective school but also truly an HPS (Agasisti et al., 2012; Agirdag & Muijs, 2023). For this purpose, we search the literature for an organizational improvement framework that can help schools raise the quality of their internal organization. The identified framework, the HPO framework (de Waal, 2010), will then be applied to a case school to identify the actions that need to be taken to help this school improve to the HPS level. Our research question can thus be formulated as follows: *How can the HPO framework be applied to support a school on its way to a higher quality level?* With our research, we aim to contribute to the literature on both educational systems and high-performance organizations, and practically we aim to provide school management with a validated framework that they can use to sustainably raise the quality of their schools.

The remainder of this article is structured as follows. In the next paragraph, we discuss the literature on holistic improvement frameworks that can help create an HPS. We then delve deeper into the chosen framework. Subsequently, the research approach used to apply the framework to the case study school is described, and the empirical research results are given and analyzed. The article ends with a conclusion, the research limitations, and opportunities for future research.

2. Models/Framework for Creating an HPS

We conducted a literature review in the scientific databases EBSCO, Emerald, and Google Scholar using the keywords 'education,' 'education systems,' and 'schools' in combination with 'high performance,' 'school performance,' 'excellence,' 'quality,' and 'frameworks.' This search yielded 52 potentially relevant studies. After studying the abstracts of these studies, 20 were removed because they did not relate to internal school performance. Of the remaining 32 studies, we read and searched the text for the nature of the frameworks and their characteristics used in the research described in those studies.

We identified three types of studies:

- Studies that mainly focus on the quality of education and only to a limited degree on internal organization and management aspects; for example, Agirdag and Muijs (2023), Van Mameren (2023), Woods and Macfarlane (2022).
- 2) Studies that look at only one aspect of internal school organization and management; for example, the quality of school leadership (see, for example, Gurr et al., 2018; Hallinger & Hosseingholizadeh, 2020; Khanal et al., 2020; Lindahl, 2010; Ngang et al., 2015), use of quality systems (Fernández Cruz et al., 2016), or school culture (Voigt et al., 2013).
- 3) Holistic studies that look at various aspects of internal school organization and management (for example, Lee, 2008; de Waal, 2011, 2012; Pandla & Gupta, 2020; Padilla et al., 2020).

We rejected type 1 and 2 studies because these were not relevant (enough) to our research purposes as they did not contain a holistic framework, and we decided to investigate the type 3 studies further. These studies could, in turn, be further subdivided:

• Most of the holistic studies described various aspects of the HPS, looking at the education system/vision, the quality of education and teachers, the internal organization, school resources, and leadership, but did not contain a framework to create the HPS (Blase et al., 2010; Lee, 2018; Pandla & Gupta, 2020; Padilla et al., 2020; Samad et al., 2014; Schleicher, 2018; Shannon & Bylsma, 2007) and could therefore not be evaluated in practice at the case study school.

- Two studies compared high-performing schools with low-performing schools, on a limited number of aspects of both education and internal organization (Bell & Cordingley, 2014; Campbell Wilcox & Ives Angelis, 2011) and, as such, did not provide a truly testable framework.
- Two studies essentially provided only a literature review of HPS (Shannon & Bylsma, 2007) or the characteristics of an evaluation system to identify an HPS (Ng & Chan, 2008) and also did not provide a framework that could be applied.
- One study provided a holistic framework for creating high-performing organizations that had been applied in a school environment (de Waal & Chachage, 2011). We decided to proceed with this framework, which is described in the next paragraph.

3. The HPO Framework

3.1 The HPO Framework

An HPO is defined as an organization that achieves financial and non-financial results that are exceedingly better than those of its peer group over a period of 5 years or more, by focusing in a disciplined way on that what really matters to the organization (de Waal, 2021). We used the HPO framework (de Waal, 2012a, 2012b) in our research. This framework forms a conceptual, scientifically validated structure (Do & Mai 2020) that organizations can use to analyze how well they perform and to decide which capabilities need to be strengthened to improve and sustain the organization's performance (de Waal & Goedegebuure 2017). We use the HPO framework in our research as Do and Mai (2020, p. 305) stated, based on an extensive literature review, that "we found only the HPO framework developed by de Waal in the HPO literature as an example of scientifically validated conceptualization of HPO." Additionally, this framework has been extensively tested in practice, as reported by Iqbal et al. (2022) based on a bibliometric analysis of the HPO literature.

The HPO framework was developed after a comprehensive review of 290 scientific and practical publications on high performance, and a worldwide questionnaire in which respondents were asked to indicate how well they felt their organization performed on the HPO characteristics (on a scale of 1 to 10) and also how the results of the organization where they worked compared to those of peer groups. The respondents' data were statistically analyzed (de Waal, 2012a, 2012b, 2020), yielding five factors that all correlated with competitive performance.

The five HPO factors are (the HPO characteristics are listed in Appendix 1):

- *Continuous Improvement and Renewal.* An HPO compensates for competitive strategies by renewing and making them unique. The organization continuously improves, simplifies, and aligns its processes and innovates its products and services, creating new sources of competitive advantage to respond to market developments. Moreover, an HPO manages its core competencies efficiently and outsources non-core competencies.
- *Openness and Action Orientation.* An HPO has an open culture, meaning that management values employees' opinions and involves them in important organizational processes. Making mistakes is allowed and seen as a learning opportunity. Employees spend much time on dialogue, knowledge sharing, and learning to develop new ideas aimed at increasing their performance and making the organization performance-oriented. Managers are personally involved in experiments, promoting a culture of change in the organization.
- *Management Quality*. Belief and trust in others and fair treatment are encouraged in an HPO. Managers are reliable, live with integrity, show commitment, enthusiasm, and respect, and have a decisive, action-oriented decision-making style. Management holds people accountable for their results through clear responsibilities for performance. Values and strategy are communicated throughout the organization so everyone knows and embraces them.
- *Employee Quality.* An HPO collects and recruits a diverse and complementary management team and workforce with maximum resilience and flexibility. Employees are encouraged to develop their skills to achieve extraordinary results and want to be held accountable for their performance, increasing creativity and leading to better results.
- Long-Term Orientation. An HPO grows through partnerships with suppliers and customers, extending long-term engagement to all stakeholders. Vacancies are first filled by internal candidates with high potential, and people are encouraged to become leaders. An HPO creates a safe workplace (both physically and mentally) and only dismisses employees as a last resort.

The HPO research shows a direct and positive relationship between the five HPO factors and competitive

performance: the higher the scores on the HPO factors, the better the organization's results, and the lower the HPO scores, the lower the competitive performance.

3.2 The HPO Framework and Educational Institutions

The HPO framework has previously been applied in various educational environments. De Waal and Chachage (2011) evaluated whether the then newly developed HPO framework could help an African university become one of the first high-performance educational organizations in Africa. De Waal (2012) examined whether the HPO framework could help a rapidly growing South American college manage its growth more controlled and sustainably. De Waal and Sultan (2012) tested the suitability of the HPO framework in a Middle Eastern context, specifically at the Palestine Polytechnic University (PPU), and found that the framework is suitable for helping organizations in the Middle East improve their performance. De Waal and Kerklaan (2015) developed an evidence-based management approach to create high-performance higher education institutions, i.e., institutions that make conscious decisions to move forward and transform into high performers in the long term using the HPO Framework, and successfully applied this to a university in Vietnam. Finally, Agirdag and Muijs (2023) examined the effectiveness of a specific school leadership development program in the Netherlands, a professional development initiative aimed at evidence-informed school and leadership improvement. This so-called HPS program used, among other frameworks and methods, the HPO framework and was offered as a professionalization program to all schools in the Netherlands. The researchers found that schools participating in the program performed better than comparison schools. Moderate to large improvements were found, corresponding to six to eight months of additional student learning progress.

The aforementioned studies gave us confidence that the HPO framework could be well-suited in the Dutch education context to help the case school identify issues and then address them in a way that the school can grow to the HPS level.

4. Research Approach

4.1 Study Method

A qualitative approach was used for this case study (Kwok, 2012). Exploratory research is an unstructured research design to obtain information about the phenomenon studied (Yin, 2009). A descriptive case study describes, based on observation and collected data, the situation of an organization. The case study format allows researchers to directly communicate with people in the organization in the natural environment through interviews, leading to more understanding (Yin, 2009). Qualitative research aims to gain an in-depth understanding of a phenomenon, in this case, the relationship between the HPO framework and a school's performance levels (Patton, 1987). In our research, a questionnaire was administered at the case study school to collect the opinions of management, teachers, and support staff numerically on how far their school was on its way to HPO status. Additionally, semi-structured interviews were conducted (Yilmaz, 2013) using an interview guide (Zikmund et al., 2004). The main advantage of using a qualitative approach alongside quantitative data collection is that it allows for why, how, and what questions, to better understand the nature of the phenomenon (Benbasat et al., 1987). The data was then analyzed in a qualitative way, first individually by each researcher and subsequently in several joint discussion sessions. Finally, the findings were verified with the management of the school during a discussion meeting.

4.2 Measurement Scale

De Waal (2012, 2020) developed an HPO questionnaire to measure an organization's high-performance level and validated this questionnaire in many different contexts of industries, countries, organization sizes, and types (Iqbal et al., 2022). Management, teachers, and support staff were asked to complete this questionnaire containing statements about the 35 HPO characteristics, with possible answers on an absolute scale from 1 ('I completely disagree with this statement, we do not have this characteristic at all in our school') to 10 ('I completely agree with this statement, this characteristic is fully implemented in our school'). The resulting scores were collected and used to calculate the average scores on the HPO factors and characteristics for the case study school. The scores indicated the points of attention where the school needed to take action to improve and become an HPO.

4.3 The case school

Since 1959, Mgr. Hanssen has been a leader in education for children with hearing, speech, and language problems. The school provides specialized education and support for deaf and hard-of-hearing children and children with language development disorders. The mission of Mgr. Hanssen is to provide high-quality special education and outpatient guidance, in collaboration with parents and partners, aiming at enabling students with language development disorders and/or auditory impairments to transition responsibly to an appropriate form of further education. To this end, each child is provided with tailored support, combining expert care where possible

with a goal of regular reintegration. The ambition is to facilitate a responsible transition for children to regular or special primary and secondary education. This is achieved by methodically addressing the specific educational needs of the children and ensuring alignment with regular education programs.

The school's philosophy is rooted in an ecological perspective, emphasizing the overall development of the child and interaction with the environment. Key elements include:

- Movement: encouraging physical awareness and mobility to build the child's confidence and well-being.
- Social-emotional development: promoting social skills and a positive self-image to enable constructive relationships and open communication.
- Language: emphasizing both oral and written communication along with social competence to ensure effective information exchange and understanding.

Mgr. Hanssen operates from four educational locations in the south of the Netherlands, with over 200 staff and teachers serving approximately 950 students. The services extend beyond these schools as there are also consultants and outpatient counselors supporting children and teachers at various schools in the region.

5. Research Results and Analysis

5.1 Motivation for Implementing the HPO Framework

In recent years, Mgr. Hanssen has worked hard on the professional development of the organizational culture. Senge's (1990) concept of the 'Learning Organization' had served as a guide during this period. This had already yielded many benefits, and the organization continued to seek ways to operate sustainably at a high-quality level. At that time, the organization had been ISO-9001 and KSO ('Kwaliteitsnorm Speciaal Onderwijs' which stands for 'Quality Standard Special Education') certified for three years and had received the GOOD designation from the Education Inspectorate. The KSO is a process-oriented development tool that helps schools describe, implement, and secure quality policies in their organization. Still, Mgr. Hanssen wanted to take the next step in its continuous improvement journey and chose the HPO framework for this purpose. A baseline measurement using the HPO Questionnaire was seen as a logical and meaningful first step in line with the organization's improvement ambitions.

The reason for choosing the HPO Framework lay in the background of several management team members who participated in a learning program several years ago for their re-registration as a Dutch school director. As part of this program, one of them wrote an essay on high performance using the HPO Framework. When Mgr. Hanssen received the distinctions, the manager recalled the HPO philosophy and found it a good next step in the school's quality journey. The management team then looked at several potentially suitable HPO models and frameworks and chose the De Waal HPO framework. The main reason was that other frameworks focused primarily on developing management, while the HPO Framework explicitly involves not only managers but also employees working together to develop an organization. This better suited Mgr. Hanssen, where the management team is not seen as a 'primus inter pares' leading other managers and staff but rather as equal among equals.

Mgr. Hanssen was a suitable case company for the research due to its established reputation in special education and strong commitment to quality improvement, demonstrated through ISO-9001 and KSO certifications. The school's alignment with the principles of the HPO framework, coupled with management's familiarity with high-performance concepts, made it an ideal environment for further development. Additionally, Mgr. Hanssen's collaborative leadership style and open culture of shared decision-making aligned well with the goals of the HPO transformation, providing a strong foundation for applying the framework effectively.

5.2 HPO Scores of Mgr. Hanssen

During a general meeting with all employees, the purpose and set-up of the HPO Diagnosis was explained to them. Subsequently, the HPO questionnaire was distributed to all employees of Mgr. Hanssen with the request to rate the school department and location where they primarily worked on the 35 HPO characteristics. All respondents were promised confidentiality; they therefore did not need to enter their name nor their e-mail address. They received a general link to the questionnaire, not on their name. In addition, participation was voluntary, and there was no check on whether individuals filled-in the questionnaire. A total of 156 completed questionnaires were collected, yielding a response rate of 69.6%, close to the desired response rate of 70% for HPO studies (de Waal, 2020). Figure 1 shows the scores on the HPO factors for Mgr. Hanssen, and Appendix 1 provides detailed scores per HPO characteristic. These scores are compared to the average scores on the HPO factors for Dutch educational institutions; these data are sourced from the HPO database maintained by the HPO Center, which includes all data collected with the HPO questionnaire over the past 20 years.

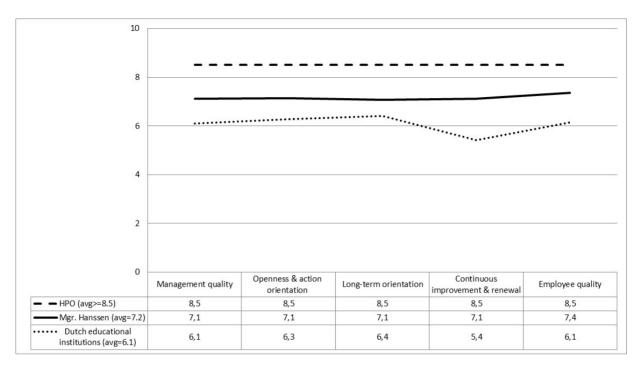


Figure 1. The HPO factor scores for Mgr. Hanssen and Dutch educational institutions

Figure 1 shows that, although Mgr. Hanssen is not yet an HPO, the school is well on its way compared to the average Dutch educational institution. It appears that the scores of Mgr. Hanssen reflect the efforts the school has made in recent years to improve quality. The management emphasized that part of these efforts was to ensure that the school's financial base was healthy at all times. After all, not only are financial resources needed for the regular operation of a school, but also for funding the intended quality initiatives. Therefore, Mgr. Hanssen had invested much energy in making its processes cost-efficient in recent years and obtaining subsidies made available by, for example, the Ministry of Education in the context of quality improvement. This allowed Mgr. Hanssen to meet its staffing needs quickly and adequately, something that earlier research has shown: the better the organization performs, the easier it is to attract new employees (de Waal, 2022).

5.3 The Interviews

In-depth interviews allow interviewees to express themselves freely by sharing information and giving their perception of issues that can help or hinder achieving high performance in their organization (Pole & Lampard, 2002; Rabionet, 2011). The interviewees were interviewed at the school's locations, with a total of 20 people (management, teachers, and support staff) participating. Each respondent had been with the school for a considerable time. During the interviews, notes were made. The interview data were then transcribed and thematically analyzed along the lines of the HPO factors (Huberman & Miles Matthew, 2002).

5.4 Analysis

Mgr. Hanssen is characterized by a strong educational structure emphasizing expertise and professionalism, fostering a performance-oriented environment. The school has grown significantly, aiming to support as many children as possible. This growth is built on autonomy and trust granted to employees through the Rhineland management model, which emphasizes employee engagement, decentralization, and long-term goals over short-term gains (Avery, 2005).

The General Director noted: "We follow a form of shared leadership here. Decisions about finances and infrastructure are made by management, but we try to explain the rationale behind these, though this broader perspective is sometimes missing in the workgroups."

A teacher added: "I've received a lot of autonomy and trust. If I don't perform well, it shows in the outcomes with the children. We've also enhanced knowledge sharing among colleagues, improving overall performance."

The school maintains low staff turnover and adequate staffing, fostering a collaborative atmosphere among employees. Quality improvement is a continuous focus, supported by audits, Quick Scans, work groups, and

intervision sessions, all aligned with HPO standards. Mgr. Hanssen has earned the GOOD designation from the Education Inspectorate, and the next strategic step, as outlined in the school's plan, is to use the HPO framework to further improve educational quality. The HPO diagnosis identified three key themes for development.

A teacher reflected: "I feel supported by management, especially during personal difficulties."

A Director shared: "Strategic quality measures like audits have improved our service, fostering a culture where everyone is responsible for their own development and decisions."

Theme 1: Strive for 'Freedom in Togetherness'

Mgr. Hanssen has embraced the Rhineland management model, granting employees a high degree of freedom, flexibility, and responsibility—hallmarks of high-performing schools (Samad et al., 2014; Schleicher, 2018). This model is reinforced by intervision sessions, which encourage reflection and autonomy, and cross-functional work groups, which promote collaboration. Management is approachable and maintains strong communication across different levels.

A Location Director emphasized: "We operate in content-specific workgroups with direct teacher involvement in decision-making, aligning with the Rhineland model."

Despite these efforts, challenges remain. Not all employees fully understand the model, leading to confusion about decision-making responsibilities. Communication within the organization is often one-way, with limited dialogue, leaving employees feeling disconnected.

A teacher expressed frustration: "It feels like a lot is decided top-down. 'Together we get the job done' feels more like a slogan than something we live by."

The General Director added: "While we use shared leadership, there's still confusion about what should be handled by the workgroups versus management. We need clearer boundaries."

To fully realize the Rhineland model's potential, Mgr. Hanssen should clarify responsibilities, improve communication, and strengthen the organization's identity. Standardizing procedures, enhancing strategic decision-making involvement, and fostering cross-functional collaboration will help build cohesion.

Theme 2: Improve the Quality of the PDCA Cycle

The PDCA cycle (Plan-Do-Check-Act) is central to Mgr. Hanssen's quality management strategy, allowing for continuous evaluation and adjustment. This cycle is supported by a well-defined strategic school plan, guiding the institution toward its goals. Work groups play a key role in policy development and quality improvement, while internal supervisors ensure collaboration and address both immediate and long-term needs. Regular status updates are provided through Monday announcements and biannual meetings, fostering transparency. Audits, both internal and external, provide feedback on strategic implementation and highlight areas for improvement.

A Location Director remarked: "We've made progress through PDCA, particularly in standardizing our approach. But more work is needed to ensure consistent application across the board."

The Services Director noted: "We're committed to continuous improvement, but younger staff members still struggle with scenario planning, which affects the PDCA cycle's effectiveness."

Several issues require attention: the school's vision isn't always reflected in daily decisions, audit follow-ups lack clarity, and PDCA implementation is inconsistent across projects. Additionally, communication mechanisms such as Monday morning updates lack formal feedback loops, and status information isn't always validated against employees' needs.

To enhance the PDCA cycle's effectiveness, Mgr. Hanssen should better integrate its vision into daily operations, establish clear KPIs for audit follow-ups, and standardize PDCA across projects. Improving external orientation and ensuring structured communication and improvement meetings will further drive organizational quality.

Theme 3: Enhance Professionalism

Mgr. Hanssen has taken significant steps to ensure continuous professional development, offering regular development discussions, mandatory master's programs, and joint training sessions. These initiatives help maintain high professionalism and keep teachers engaged, which is crucial given the teacher shortage in the Netherlands (Evers et al., 2011; van Mameren, 2023).

A teacher noted: "There's a lot of freedom to pursue further education aligned with the organization's goals, which is a huge benefit."

Another teacher added: "I've always felt encouraged to grow professionally. Management has been supportive,

though the process of requesting additional training can sometimes feel slow."

The Services Director reflected: "We've built a strong system for professional development, but we face challenges in speeding up decision-making and ensuring everyone's development needs are met."

Challenges remain, including slow decision-making, lack of clarity on who is responsible for addressing problems, and inconsistent follow-up on development needs. These issues hinder proactive growth and the transformation of employees into high performers (Zwijze-Koning & de Jong, 2009).

To address these, Mgr. Hanssen should promote feedback as a learning tool, clarify responsibilities, streamline decision-making, and create a system for tracking and fulfilling development wishes. Improving transparency in decision-making processes and creating a platform for sharing best practices will support ongoing growth and engagement.

5.5 Management Response and Next Steps

The management's initial reaction to the HPO diagnosis was positive, seeing it as a thorough and valuable roadmap for improvement. Although the number of attention points initially felt overwhelming, they were ultimately appreciated as opportunities for growth.

The General Director noted: "The HPO diagnosis confirmed what we already suspected. The list of improvement opportunities serves as a roadmap for future progress, and it's not about speed but continuous improvement."

The management asked the lead author to present the results to employees transparently, which was well received. During the feedback session, employees were invited to envision Mgr. Hanssen as an HPO, fostering engagement in the school's future direction.

A Location Director commented: "Real change happens in the work groups, driven by teachers. We provide the support needed, but it's a bottom-up transformation."

The next step in the transformation was the HPO Coaches Masterclass, where several employees were trained as coaches to guide colleagues during the HPO transformation. These coaches, chosen for their broad perspective and respected positions, helped spread HPO principles across the organization, increasing transparency and addressing key issues. Employees began to appreciate that their concerns were being addressed, improving the overall working atmosphere and pride in the school.

6. Lessons Learned, Contributions, Limitations, and Future Research

In this study, we aimed to investigate whether holistic improvement frameworks (i.e., considering various aspects of internal organization and management) could be identified for schools, apply such a framework in a case study school, and evaluate whether it was suitable for improving and strengthening the internal organization and management of a school, thus creating an HPO. The de Waal HPO framework emerged as a possible option for this, leading to our research question: *How can the HPO framework be applied to support a school on its way to a higher quality level*? The HPO framework was applied at Mgr. Hanssen, a school for special education and support for deaf and hard-of-hearing children. This school had already made significant quality efforts and considered HPS as the next step. The case study research, and specifically the interviews, showed that the HPO Framework could indeed be applied to support the school on its way to higher quality level. This result is supported by various quotes from the school's management:

A Location Director remarked: "The HPO framework helped us focus on the areas where we needed improvement. It gave us structure and clarity, allowing us to target specific aspects of our operations that required attention."

Another Location Director added: "We've seen that people now appreciate that the issues they raise are being addressed. Daily work has become more pleasant, and there is growing pride in being part of Mgr. Hanssen. The HPO framework gave us the tools to make real, actionable changes."

The General Director emphasized: "Becoming an HPO is not the goal. The framework is mainly a tool for continuous improvement. What matters most is that we keep improving, step by step."

Thus, the management of Mgr. Hanssen concluded that the HPO framework was indeed appropriate and useful to evaluate its current performance status and point the school in the right direction towards higher quality levels. It was clear to the management that collaboration driven by high-performance maxims in teams and between departments and locations was key to the success of the transformation to HPO.

Additionally, the management identified the following lessons learned:

- Ensure that the organization's financial base is healthy so that sufficient people can be attracted and

retained to not only carry out daily activities but also the quality initiatives planned as part of the HPO transformation, and to fund these initiatives.

- The number of attention points resulting from the diagnosis can initially be perceived as overwhelming, so it must be emphasized to employees that this is a list that does not need to be addressed in a short time. It is more a listing of opportunities for quality improvement that the organization can work on in the coming years. That said, start small in the sense that only one attention point should be tackled at a time.
- It helps immensely if the organization already has a management style and associated communication and consultation structure that is bottom-up. A style in which management is "subordinate" to employees, with no hierarchical distance but rather a sense of "together we get the job done" (which is the motto of Mgr. Hanssen). This greatly increases employee support for initiatives such as an HPO transformation.
- Align the structure needed for the HPO transformation and the initiatives resulting from the HPO diagnosis with the existing structure of the organization, because this makes embedding HPO into daily affairs much easier, and the acceptance rate among employees much higher.
- Make sure people know that becoming HPO is not the goal of the transformation. The HPO framework is a mindset to promote continuous improvement, nothing more and nothing less. Communicate that it would be nice to become HPO, but the main goal is to realize improvement in all areas. If too much emphasis is placed on becoming excellent in itself, it can paralyze people and turn their attitude into HPO aversion, thereby nullifying the purpose of the transformation effort. Emphasize that baby steps will be taken and eventually will result in great strides.

The theoretical contribution of our research can be found in the supplementation that the research results provide to both the literature on high performance, particularly the HPO framework, and the literature on high-performance schools. Practically, the research results provide school management with a tested framework for continuous improvement that can guide them on their quality journey. Additionally, the lessons learned can help management carry out the transformation in a more controlled manner, significantly increasing the chances of success.

There are several limitations to our research that, in themselves, offer opportunities for future research. The main limitation is that the results of one case study cannot be generalized to other schools. More case studies are needed before it can be stated with absolute conviction that the HPO framework is particularly suitable for creating a high-performing school. Another limitation is the limited timeframe of the research in that we have only witnessed the start of the HPO transformation at the case school. We do not know whether the attention points resulting from the HPO Diagnosis will indeed help Mgr. Hanssen ultimately become a high-performing school. Longitudinal research is needed for this. This research was conducted at a primary school. An opportunity for future research is to conduct case studies in other types of schools, such as secondary schools and vocational schools.

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Authors contributions

André de Waal and Marco Schreurs conducted the research, analyzed the data and wrote the paper. Paul Goossens and Marianne Dirkx supervised the research and reviewed and approved the paper.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study not are available. The data are not publicly available due to privacy reasons.

Data sharing statement

No additional data are available.

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