

# Quality in preschools through systematic quality work – a principal’s perspective

Systematic  
quality work

Ingela Bäckström, Pernilla Ingelsson, Anna Mårtensson and  
Kristen M. Snyder

*Department of Communication, Quality Management and Information Systems,  
Mid Sweden University, Östersund, Sweden*

257

Received 9 August 2023  
Revised 22 November 2023  
10 February 2024  
12 February 2024  
Accepted 14 February 2024

## Abstract

**Purpose** – The purpose of this paper is to explore existing and desired methodologies for systematic quality work to promote quality in preschools from the principal’s perspective.

**Design/methodology/approach** – A collaborative approach was used in this research project, and principals were asked to complete portfolio assignments. Their answers to those portfolio assignments were analysed by the research team and subsequently compared to total quality management values.

**Findings** – Existing and desired methodologies for systematic quality work are presented and sorted into 13 and 17 groups, respectively. The principals desire four times more methodologies than they are presently using to promote systematic quality work, and the results show that they must extend their methodologies to support TQM values.

**Research limitations/implications** – This research is based on answers collected from 18 principals in one municipality in Sweden.

**Practical implications** – The use of the cornerstone model provides a framework to illustrate the application of TQM in preschools.

**Originality/value** – Principals struggle to find time for systemic quality work. The presented results can be used to work systematically with quality in preschools and other organizations.

**Keywords** Total quality management, Education, Quality management, Preschools, Systematic quality work, TQM values

**Paper type** Research paper

## Introduction

Quality has fascinated human beings for a long time (Juran, 1995), and the concept of quality was extensively discussed and became widely accepted in the 1980s (Brown, 2013). Interest in quality questions increased at the end of the 20th century, when industrialization deepened (Brown, 2013; Coleman, 2013). Quality became relevant to individuals, especially in Japan, due to damage and the corresponding need for technological, social and managerial improvements (Kanji, 1990). This situation progressively grew into a trend that has often been identified as the



© Ingela Bäckström, Pernilla Ingelsson, Anna Mårtensson and Kristen M. Snyder. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

Quality Assurance in Education  
Vol. 32 No. 2, 2024  
pp. 257-273  
Emerald Publishing Limited  
0968-4883  
DOI 10.1108/QAE-08-2023-0135

quality revolution or quality movement (Chen, Reyes, Dahlgaard and Dahlgaard-Park, 2021; Dahlgaard, Reyes, Chi-Kuang and Dahlgaard-Park, 2019; Dahlgaard-Park, 1999, 2011). One aspect of this movement consists of researchers' and practitioners' attempts to scientifically establish how quality should be managed (Zairi, 2013). National and regional quality awards emerged, stories of success became common, research on this phenomenon began to be conducted and journals specifically dedicated to quality were launched (Brown, 2013).

In the 1990s, the quality movement entered the field of education (Snyder *et al.*, 2000; Snyder, 2023) and shaped a new language and new work processes aimed at continuous improvement based on the principles of total quality management (TQM; Murgatroyd and Morgan, 1994). Whole nations have now adopted the concept of quality in education as a goal (Halinen, 2023) and a mechanism through which to control accountability (Ehren *et al.*, 2013; Ravitch, 2010).

Decades later, the term "quality" is found in most curriculum plans and policy directives; however, educators and the educational system continue to work to define and develop internal approaches to the task of ensuring systematic quality work in schools (Halinen, 2023; Hansson and Wihlborg, 2016; Sullivan and Fitzgerald, 2023). Benchmarking frameworks (Snyder, 2007) and quality awards in education (for example, Swedish Institute for Quality Better Schools, Malcolm Baldrige Excellence in Education) highlight the components of systematic quality work (i.e. customer focus, informed decision-making, strategic planning). Unfortunately, most such frameworks and awards do not provide a roadmap for how to develop a systematic approach to the achievement of quality based on the principles of quality management. This task is left up to the schools and the educators who lead them (Snyder, 2023; Tienken, 2020).

Most research on quality in preschool has focused on processes and documentation, and less attention has been given to principals' leadership, despite the fact that such leadership has been identified as crucial (Håkansson, 2016). Preschool leaders struggle to find time to engage in systemic quality work and think that their co-workers at preschools find it difficult to understand the link between systematic quality work and their daily work, although leaders profess that co-workers have the capacity to work on quality in local contexts (*ibid.*). Leithwood, Harris and Hopkins (2020), claimed that the task of leadership is to establish school conditions that promote high-quality teaching and create improvements in children's outcomes. According to preschool teachers from three different European countries (including Sweden), the most important factors associated with quality in preschool are my own attitude, the size of the child group, the density of teachers, the working climate, relationships between children and adults and pedagogical planning (Brodin, Hollerer, Renblad and Stancheva-Popkostadinova, 2015). Thus, the purpose of this paper is to explore existing and desired methodologies for systematic quality work to achieve quality in preschools from principal's perspective.

### *Systematic quality work*

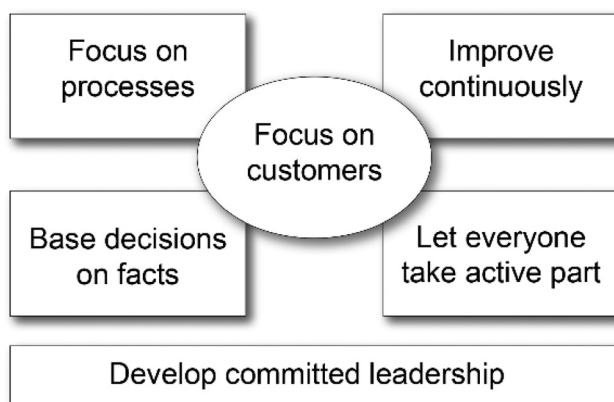
Quality management (QM), also referred to as TQM, is an approach to organizational development that focuses on a systematic process aimed at connecting customer needs, organizational values and goals with strategic planning and organizational culture and structures with the goal of continuously improving services and products for customers and stakeholders (Deming, 1994; Juran, 1995; Bergman, Bäckström, Garvare and Klefsjö, 2022). A quality management system functions as a support mechanism for organizations in which information is documented systematically and used as a basis identifying strengths and areas for improvement. Systematic quality work is generally conceptualized using the Deming cycle to improve continuously and systematically through four stages, i.e. Plan, Do, Study and Act, also known as the PDSA cycle (Deming, 1994). Through the four stages,

achieving quality is viewed as a dynamic process in which the end goal is continuously evolving.

Research has shown that working systematically with QM is an approach that focuses on the customer, thereby empowering coworkers and developing committed leadership (Mohammad and Rad, 2006), as required in Curriculum for the Preschool, Lpfö 18 (Skolverket, 2018). QM has a strong participatory element according to which all co-workers in the organization should be involved in the quality work (Sila and Ebrahimpour, 2002). Positive effects have, for instance, been shown with regard to job satisfaction, increased profitability and customer satisfaction in organizations working with values derived from total quality management (Hansson and Eriksson, 2002; Lagrosen, 2000; Westlund and Löthgren, 2001).

Although different authors have used different terms to refer to the content of TQM, for instance, factors, key elements, values, cornerstones or principles (Foster, 2004; Dale, 2003; Sila and Ebrahimpour, 2002; Lagrosen, 2006), several researchers have agreed on the following core values: “focus on customers”, “develop committed leadership”, “let everybody take active part”, “improve continuously”, “focus on processes” and “base decisions on facts” (Bergman *et al.*, 2022); see also Figure 1. In this article, the cornerstone model of TQM as illustrated and described by Bergman *et al.* (2022) is used.

According to the Cornerstone model, the core value of focusing on customers requires practitioners to determine who customers are, both now and in the future and to ascertain the “needs and expectations of these customers and making sure to meet, and preferably exceed, customer needs and expectations” (Bergman *et al.*, 2022). The core value of developing committed leadership presupposes a leadership approach based on “visibility, clarity, and personal commitment” (*ibid.*). The cornerstone “let everybody take an active part” emphasizes the task of ensuring that all employees can be committed and actively participate in decision-making and improvement. Continuous quality improvement is necessary for all organizations that want to last, which is why “improve continuously” is a cornerstone. Many operations within organizations aim to convert resources, such as information or material resources, into outputs or results. The output must be aimed at either internal or external customers. This process is repeated over time. Such processes can be studied in detail, enabling us to learn from history, improve and develop to ensure that the future results will be better. This process is the essence of the cornerstone “focus on processes”. Working according to the sixth and final cornerstone entails the attempt to base



**Figure 1.**  
The cornerstone model including the values or cornerstones are the basis of TQM (Bergman *et al.*, 2022, p. 60)

decisions on facts: “doing so requires knowledge concerning variation and the ability to distinguish between ‘random variation’ and variation due to assignable identifiable causes” (ibid.). These core values are all linked with one another and should be viewed as a whole; they are more effective when treated jointly than separately (ibid.). The use of TQM in an organization must be based on management’s whole-hearted and constant commitment to quality and the establishment of a culture based on these values (ibid.). A clear and committed leadership is very important for establishing such a culture to ensure the success and sustainability of quality improvements.

#### *Systematic quality work in education*

Developing schools from a systematic quality perspective is process-oriented and information-based (Snyder *et al.*, 2000; Snyder, 2023). The systematic quality development perspective is guided by frameworks that identify a series of components within the schooling system that operate interdependently to establish the conditions necessary for meeting the needs of both internal and external customers (teachers and students) (Mårtensson and Snyder, 2023; Kaplani and Zafiroopoulos, 2022). Studies demonstrate that while quality management models support quality development in schools, successful implementation is based on a variety of factors, including commitment of all members, leadership and transparent information systems (Khurniawan, Sailah, Muljono, Indriyanto and Maarif, 2021; Suriansyah, 2017).

The national agenda for education in Sweden requires all schools to work according to a systematic quality model to secure and support the learning and development of all youth (Skolverket, 2023). Despite the Swedish education agenda and existing success stories of systematic quality in education, research demonstrates that most principals struggle to implement such a framework (Snyder, 2023). Many principals are ill-prepared to lead from a systemic quality management approach due to outdated principal training programs (Acker-Hocevar, 2023; Mann, 2023; Scanga and Sedlack, 2023; Sullivan, 2023), and the dominant model of quality assurance based on external audits and inspections (Ravitch, 2010; Snyder, 2023). This research is directed to schooling at all levels and does not distinguish between pre-schools or other levels.

In Sweden, municipalities have the responsibility to develop their systematic quality system in their schools. However, many continue to use simplified measures based on student outcomes and external audits. Consequently, quality remains in the hands of external agents rather than internal workers. In municipalities where systematic quality models are in place, some questions remain about how to create buy-in and a sense of ownership at all levels of the system. This addresses the question to continue to develop ways of working that are in line with quality management values.

#### **Methodology**

The case examined is a group of preschools in a municipality in Sweden. Preschools in Sweden are required to work systematically with quality issues to discern, evaluate and improve aspects of preschool that are important for children’s well-being, play, learning and development (Skolverket, 2018). The principals of these schools are responsible for “carrying out systematic work on quality together with preschool teachers, child minders and other staff, as well as providing children’s guardians with opportunities to participate in work on quality” (ibid.). Quality in Swedish preschools is connected to certain essential values, tasks and knowledge, which are listed as objectives and guidelines in the preschool curriculum, and the question of how well preschool works towards these objectives is salient (ibid.)

---

In 2019, a research and development project was initiated as a collaboration between a university and a municipality. Four researchers from the same subject group and one superintendent from the municipality participated in the project group. A total of 21 principals of preschools were the target of the project, and they participated in quality workshops and completed assignments between those quality workshops. The preschools were all under the auspices of the municipality. The municipality includes nearly 64,000 inhabitants, thereby ranking it in the upper quarter among the 290 municipalities in Sweden. The 21 principals were responsible for 49 preschools including approximately 600 co-workers and 3,000 children.

### *Project design*

This four-year project aimed at enhancing quality in preschools, focusing on the principals' ability to work with quality development in a systematic way. The research was needs-based and adopted an interactive research approach. Therefore, the definition of interactive research provided by [Johansson and Wallo \(2020\)](#) guided all stages of the project. Continuous quality workshops with the principals and meetings with the superintendent were conducted, and recurrent measurements were taken using a survey.

At the beginning of the project, the quality workshops were held in person, but due to the pandemic, the quality workshops were held online between March 2020 and the end of 2022. Between the quality workshops, the principals were given portfolio assignments. The purpose of the portfolio assignments was to encourage the principals to develop both as individuals and as a group. Some of the portfolio assignments were also used to collect empirical data, always on a voluntary basis. The design and content of the quality workshops and the portfolio assignments were developed continuously in collaboration with researchers and superintendent and were adapted throughout the process based on the results of the quality workshops and the answers to the portfolio assignments. In total, 23 quality workshops were conducted, and 15 portfolio assignments were created and handled out.

### *Methodological considerations*

This kind of research, which features collaboration among superintendents, principals and researchers, emphasizes the importance of separating the roles of practitioner and researcher. It focuses on reflection and distance in both time and space to achieve the aims of critical research ([Shani et al., 2007](#)). Therefore, the researchers conducted and analysed meetings between the quality workshops before the involvement of the superintendent, and the project time of four years ensured sufficient time between the quality workshops. The collaborative research approach is characterized by shared responsibility for other partners' learning and knowledge ([Shani et al., 2007](#)). Hence, practitioners would benefit if the researchers succeeded in enhancing the quality in preschools by increasing the principals' ability to work with quality development in a systematic way. In collaboratively managed projects, the research approach is developed jointly, and the information used is generated in a collaborative manner. Additionally, the decisions made during the process are based on mutual agreement ([Chisholm and Elden, 1993](#)). This project was collaboratively managed, as the researchers prepared the quality workshops, but the principals were also assigned portfolio assignments between the quality workshops that influenced the outcomes of the research.

### *Data collection and analysis*

An interview guide inspired by appreciative inquiry (AI) was developed by the research team and used during the first quality workshop to identify success factors for ensuring high quality in

a preschool setting. AI is a method that aims to foster sustainable change and development in organizations by focusing on what is the best – i.e. in the past, the present and the future (Whitney *et al.*, 2010). By asking powerful questions and encouraging dreaming, AI inspires generative practice among leaders (Cooperrider and Srivastva, 1987). The questions in the three portfolio assignments made after the first quality workshop were inspired by AI. The rest of the portfolio assignments had a more general phrasing in the questions. In the study presented in this paper, the four first portfolio assignments were used. The principals were asked to reflect upon and write down their answers in the portfolio and then submit them. The principals' answers to the portfolio assignments were analysed by the research team.

Below the four portfolio assignments are listed:

*1. Success factors (to deliver high quality)*

- Briefly summarize the success factors that exist in your preschool and those that you consider to be most critical for you in your preschool. What do you need to strengthen, and what do you need to keep?
- Which people in your preschool are zealots/drivers/enthusiasts for improvement?
- Who can help you achieve success in your preschool (both internally and externally)?

*2. Goal image*

- What goals do you have for yourself?
- What goals do you have for your preschool?
- How do you work with goals/goal images/goal sharing in your preschool?
- How would you like to work?

*3. Visualization and motivation*

- In your preschool, what is most important to work on during the coming autumn, and how do these factors connect to overall development work?
- How do you want to organize the work towards these factors in your preschool? Include all possibilities from “just like today” to “completely different” and write down what that means.
- What support do you need to be able to drive this improvement work in your preschool – for example, methodological support, training (your own or that of others), cooperation or technical solutions?
- How can you support others?

*4. Reflections and looking ahead*

- What do you need to develop yourself to increase your ability to carry out improvement work in the preschool?
- How can this task be accomplished?
- What should you do?
- With what do you need help?
- Who can help you?

---

Out of 21 principals, 18 completed the portfolio assignments, and all the answers were read by all four researchers. The instructions provided to the researchers were as follows: Read through the answers and underline, colour or cut out answers that describe the following:

- methodologies (descriptions of how and what) that are used today in systematic quality work; and
- methodologies (descriptions of how and what) that are desired in systematic quality work.

Mark these two possibilities differently, for example, by using different colours so that we can distinguish them. In the next step, the researchers' marks were compared.

The purpose of this approach was to understand how the principals worked systematically with quality and how they wanted to work systematically with quality without asking them directly. The aim of this approach was to obtain richer answers and capture work that the principals may not have identified as systematically quality work. Then, the researchers met to discuss and compare what they had seen in the answers from the principals. When all researchers reached an agreement, the methodologies were listed on sticky notes on a digital board where they could then be sorted into groups. The existing methodologies and the desired methodologies were analysed separately. The sorting and categorization into groups were made by the first author and then discussed with the other three researchers to reach agreement. Some adjustments were made. The resulting categories were supposed to reflect the content of the methodologies and could naturally have been written using another phrasing. A gap analysis was conducted between the existing methodologies and the desired methodologies to explore the differences between them. The results were then analysed using the cornerstone model (Bergman *et al.*, 2022) for each group, i.e. existing and desired methodologies for systematic quality work. This approach made it possible to compare the existing methodologies with the desired methodologies for systematic quality work through the lens of the cornerstone model.

## Results

The results of the analysis of the principals' answers with regard to existing and desired methodologies for systematic quality work are presented below. A total of 54 existing methodologies and 222 desired methodologies in terms of the pursuit of quality in preschools were identified by the researchers according to the instructions when reading through all assignments. The identified methodologies were sorted into groups. The labels used for the groups could have been phrased differently, and some of the methodologies could have been listed under another group. These results were then analysed and compared to each other to illustrate the corresponding gaps; see [Table 1](#), and the gap analysis below.

### *Existing methodologies for systematic quality work*

When existing methodologies for systematic quality work were analysed and sorted, 13 groups emerged: *support for leaders*, *present and clear leadership*, *visible leadership*, *holistic view*, *teamwork*, *reflection*, *everybody's engagement*, *employee competence*, *quality development*, *structure*, *culture/values*, *goal and vision and benefit for the children*. These are exemplified below.

*Support for leaders* is help and support that the principals have, for example, help from the immediate manager and help from the child and student health psychologist. They also have administrative support around administration, financial follow-up and recruitment.

Groups of existing methodologies versus the desired methodologies			
Existing groups of methodologies	Quantity	Desired groups of methodologies	Quantity
Support for leaders	6	Support provided to leaders	12
Present and clear leadership	5	Support for and engagement with employees	45
Visible leadership	2	Visible and clear leadership	15
Holistic view	6	Holistic view	6
		Facts- and research-based leadership development	20
		Leadership/pedagogical leadership	11
Teamwork	5	Teamwork	7
Reflection	4	Reflection	14
Everybody's engagement	5	Involved and engaged employees	7
Employee competence	5	Competence/development/learning	15
Quality development	3	Development work	18
Structure	7	Structure/systematics	30
Culture/values	3	Culture/values	8
Goal and vision	1	Goal and vision	8
Benefit for the children	2	Childrens needs	3
		Process-oriented	2
		Work environment	1
<i>Total</i>	54		222

**Table 1.**  
Gap analysis

**Source:** Authors' own work

*Present and clear leadership.* The principals describe that they try to be a present and clear manager who sets the direction for the preschool and that they have an approach that is clear and interested. They work a lot with talking about the goals in different contexts and have good communication with the employees.

*Visible leadership* is about being at the preschool certain days and formulates a task for each group.

*Holistic view.* To build a holistic view the principals work with cooperation at the preschool and work together in big teams. The message is one preschool everyone's children. They also use staff rotates approximately every two years.

*Teamwork.* The principals think they complement each other in the team and at the preschools and that they benefit from each other's skills. They have good cooperation in the team, and they support each other a lot in their leader team.

*Reflection.* They have reflection time, alone and together. They go back and look at what they have done and come up before moving on to the next part. Some have extended the time to the teams for planning, reflection and follow-up.

*Everybody's engagement.* To promote everybody's engagement the principals delegate and do not poke their noses. It is teamwork were all are a part of the puzzle that becomes the whole.

*Employee competence.* The key is to have trained staff. The principals are taken advantage of different strengths and use collegial learning. They have drivers that are important for both stability and development.

*Quality development.* They have structured quality work pilot per department that processes development issues in the teams. They also have development manager who is a good help in driving the development work and getting colleagues on board.

*Structure.* The principals describe that they have structured the work with certain common documents and templates. They have clear distribution of responsibility in different groups with responsibility for different parts and they review the responsibilities



---

every year in the various groups and changes if necessary. They have a clear plan for the year and the year wheel is linked to the values (fun, secure, rich in learning and equivalent) and the vision.

*Culture/values.* They work with treatment, the culture and how they behave. Everyone dares to make their voice heard – where all opinions are important, and everyone is encouraged to raise their thoughts. The principals constantly return to the value words.

*Goal and vision.* They have clear target image, and it is the curriculum for the preschool that applies.

*Benefit for the children.* Focus is on the best interests of the child - benefit for the children.

#### *Desired methodologies for systematic quality work*

When desired methodologies for systematic quality work were analysed and grouped, 17 groups emerged: *support provided to leaders, support for and engagement with employees, visible and clear leadership, holistic view, facts- and research-based leadership development, leadership/pedagogical leadership, teamwork, reflection, involved and engaged employees, competence/development/learning, development work, structure/systematics, culture/values, goal and vision, children's needs and process-oriented.* They are exemplified below.

*Support provided to leaders.* The principals want to obtain support from student health to strengthen them in their leader role and organizational development. They wish to support each other within the team, and they need help with prioritizing. They want help from their colleagues in the team and from the other principals' group. They also need better support from economists and simpler systems.

*Support for and engagement with employees.* The principals want to help pedagogues use the time available to them for reflection. They want to be a source of support for the employees to be able to support the teachers and spend time with the pedagogues and the team and become more familiar. They wish to listen in and be responsive and to have a trusting relationship with the employees as well as be a present. Some plan to have a positive approach and identify opportunities and motivate employees to develop. They wish to anchor the common goal image that they have prioritized for development work and also to be a goalkeeper as well as ensure that the supervision sessions are more directed towards the common goal. The principals want to strengthen the organization by ensuring that everyone becomes involved by persevere and ensure that everyone is on. They want to help the team to work together and work entirely locally with what is needed. Also, to support staff more effectively and exhibit openness towards and engage in dialogue with each other. Exhibit sustainable leadership and think and act in a constructive and positive manner. The principals want to improve their skills at delegating and practice giving feedback including being an equivalent and secure manager. Work with communication and relationships and think before acting and sometimes wait to answer until knowing to have had a chance to think properly. The principals also want to be careful to take breaks during the day and not work more than 40 hours/week to be a good role model.

*Visible and clear leadership.* The principals want to be present and listen to be able to be a clear leader who sets a direction based on the needs of the children. Be a responsive principal and offer a picture of what is expected of the pedagogue, the work team, the preschool and the children. They wish to work more visually and visualize more frequently to become a clear and driven leader. Be out in the preschool as much as possible as well as engage in clear communication in writing with everyone simultaneously. Listen in and try to maintain a common thread. As a leader, be challenging when necessary and as understandable and clear as possible.

*Holistic view.* The principals want to build a sense of coherence and achieve a balance among the preschools. They wish to have a joint work plan for the whole preschool including cross-groups and have staff who see the big picture. They plan to continue to work on being one preschool to extend openness among departments.

*Facts- and research-based leadership development.* The principals want to work based on lectures and literature, read more literature about preschool and leadership and fill up with knowledge. Some want to use the rector's training as a form of competence development and a way of exchanging experiences. They wish to develop alongside the pedagogues, adopt a more coaching-focused attitude during the meetings and increase knowledge of educational leadership. Furthermore, they want to increase knowledge of their mission as principal. They desire to seek new challenges and try new things and continue to be curious and interested in the profession.

*Leadership/pedagogical leadership.* The principals want to have more time for pedagogical leadership, being able to be out in the business more, provide supervision, support and guidance to a greater extent. They want to describe what preschool entails, e.g. group activities, relationships, school legacy, curriculum and child conversion. They wish to stick to the overall systematic quality work that has been started and continue to strengthen communication among employees. They want to be a confident and courageous leader and have clear professional roles, in which no one is worse or better, they merely have different roles.

*Teamwork.* The principals desire for collegial exchange both within and among teams and want to form cross-groups among the preschools and promote even more cooperation. They plan to create a close collaboration with their colleague and the special education teacher and the other principal's team. Some intend to relieve colleagues in the area by taking on joint assignments.

*Reflection.* The principals want to reflect more effectively on various theories that support their activities and how they interpret what is written, what different things mean, what play means to them and the scientific theories on which they base themselves. They plan to continue to implement a way of working according to which reflection with the children becomes a natural part of the planning. In the future have each department a half-day of extended reflection in the fall and two in the spring, which is where the systematic quality work takes place. Some want to practice not being in an excessive hurry; focus on analysing and reflection.

*Involved and engaged employees.* The principals want to create trusting relationships and make more of the staff's involvement in the overall work at the preschool. They want everyone to feel involved, and that everyone does their part as in the setting of goals based on the curriculum. The principals wish to work with the work environment based on work team/house development.

*Competence/development/learning.* The principals want to train the employees in analytical work to develop the teacher's analysis as an important part of the learning environment. The principals wish to engage in collegial learning. They want to spend a lot of time on development work and ensure that employees can grow/lifelong learning as well as initiate forward-thinking collaborations with both experienced and less experienced people. They hope for being able to employ trained staff and share their own experiences and do training in coaching methods somehow educational effort based on the values.

*Development work.* The principals want to continue to drive the organization to engage in systematic quality work with clearer follow-ups and to answer the questions of what and how and analyse. They wish to work more creatively and focus on improvement issues, follow up and create a better plan that is realistic. Further they want to make use of the

children's reflections and thoughts to drive the work forwards and continue to perform development work with preschools that are not afraid of change.

*Structure/systematics.* The principals want to produce more systematic evaluations with the children, develop methods to capture the children's feelings in everyday life and collegially share experiences of these feelings. They wish to develop clearer forms of documentation and work with the curriculum based on a year wheel. They desire to create common documents across the different preschools and provide clearer documentation to improve the structure. They wish to provide a clearer structure, work plans and finances as well as ensure clarity on the website. The principals want to create a better structure and an annual cycle including well-planned and organized work and use common templates for documentation. They also want to create more room in the calendar and structure their weeks and keep themselves in check as well as develop reflection and analysis. For example, frequent follow-ups according to systematic quality work based on the following questions: where are we, where are we going, how did it happen and why did it happen the way it did? The principals wish to achieve balance in their duties, and they need clear assignments from the operations manager.

*Culture/values.* The principals want to use the values (fun, secure, rich in learning and equivalent) at all preschools and clarify what these values mean for staff to enhancing the work environment. Constantly return to the values and spend time on the culture at the preschools, i.e. our why - the vision. The principals wish to create a climate in the principal's group where there is okay to ask for help and strive to talk to each other, not about each other.

*Goal and vision.* The principals want to create goals for each preschool based on the values that should permeate the organization. They wish to obtain a clear assignment from the superintendent to ensure that we support each other. The principals think that everyone should know their "why" and the vision should be clear to all employees. The preschool's vision is to live up to the curriculum to achieve this a clear quality work is required.

*Children's needs.* The principals want to emphasize on the educational development and the benefit of the children as well as on the children's needs.

*Process-oriented.* The principals wish to implement a process-oriented way of working with educational documentation as a foundation.

*Work environment.* Health-care group carries out voluntary evening activity once/month where different activities with focus on enthusiasm and community are tested.

## Analysis

The groups of existing methodologies were compared to the desired methodologies using a gap analysis (see [Table 1](#)).

The gap analysis indicates large differences between the existing groups of methodologies and the desired groups of methodologies, both in terms of the number of methodologies included in the groups and in the fact that the desired category contains four more groups of methodologies.

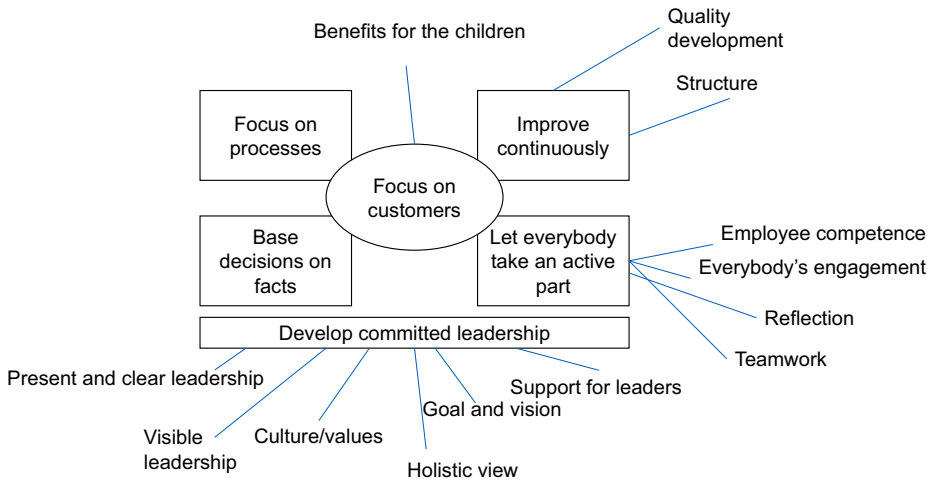
### *Analyses versus the content of total quality management*

The groups of existing and desired methodologies were also analysed with respect to the TQM values to investigate the conditions necessary for achieving quality in preschools. The groups of methodologies were analysed in light of the core values "focus on customers", "develop committed leadership", "let everybody take an active part", "improve continuously", "focus on processes" and "base decisions on facts", as indicated by

Bergman *et al.* (2022). First, the existing groups of methodologies are shown in Figure 2, and then the desired groups of methodologies are shown in Figure 3.

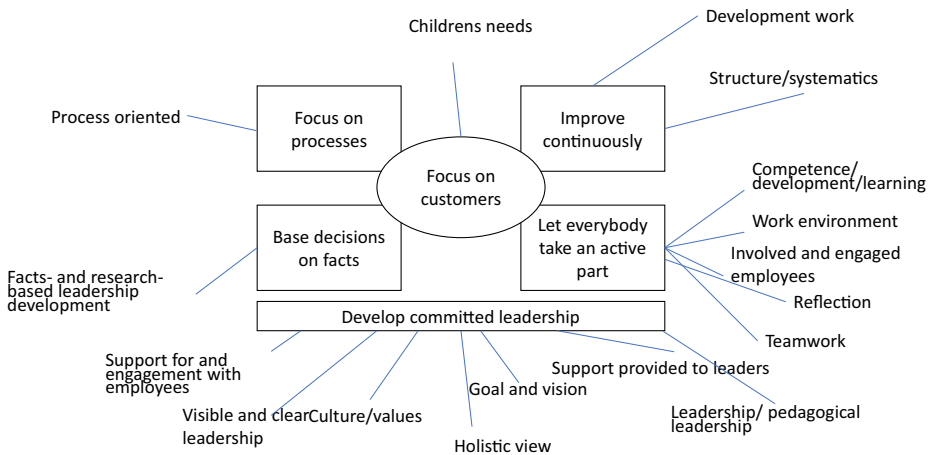
The analysis shows that the existing groups of methodologies represent four of six TQM values. The two missing values are “Focus on processes” and “Base decisions on facts”.

The analysis of these methodologies in light of the TQM values shows that all TQM values were represented in the groups of desired methodologies, although few such methodologies emphasized the values “Focus on processes”, “Base decisions on facts” and



**Figure 2.**  
Existing groups of methodologies in light of TQM values

Source: Authors' own work



**Figure 3.**  
Desired groups of methodologies in light of TQM values

Source: Authors' own work

---

“Focus on customers”. Both a few groups of methodologies and a few methodologies within those groups are shown in [Table 1](#).

## Discussion

When the portfolio answers provided by the principals were analysed, 54 methodologies they were using in their systematic quality work and 222 methodologies that they desired to use in that context were found. The principles desired four times more methodologies than they were presently using. Accordingly, we can conclude that they believed it was necessary to implement much more systematic quality work to improve the quality in the preschools. This finding is in line with [Håkansson \(2016\)](#), who claimed that principals struggle to find time for systematic quality work. The following question thus arises: how can principals restructure their quality work to be more systematic? We can conclude that the principals truly want to engage in more systematic quality work. According to [Leithwood et al. \(2020\)](#), it is the task of leadership to establish school conditions that promote high-quality teaching and create improvements in children’s outcomes, which must be accomplished through systematic quality work.

All desired groups of methodologies include more methodologies than the existing groups of methodologies except for “Holistic view”, which includes six identified methodologies in each case. Four groups of methodologies are included in the desired groups but not in the existing groups of methodologies: “Fact- and research-based leadership development”, “Leadership/pedagogical leadership”, “Process-oriented” and “Work environment”. These four groups of methodologies that the principals want to include in their systematic quality work is important when positive effects such as job satisfaction, increased profitability and customer satisfaction are expected from the work with TQM values ([Hansson and Eriksson, 2002](#); [Lagrosen, 2000](#); [Westlund and Löthgren, 2001](#)). Leadership, commitment of all members and transparent information systems are factors needed in schools for successful implementation of quality development ([Khurniawan et al., 2021](#); [Suriansyah, 2017](#)).

The result indicate that the principals must extend their methodologies to support the TQM values or cornerstone of “Focus on processes” and “Base decisions on facts”, as no methodologies that could be sorted into these values were found when analysing existing methodologies. In the analysis of the desired group of methodologies for improving quality in preschools, all TQM values were found. Accordingly, we can conclude that principals want to ensure quality in preschools by promoting more systematic quality work but must balance this activity more effectively with regard to the values that are missing and weak, as the TQM core values (cornerstones) are more effective when treated jointly than separately ([Bergman et al., 2022](#)). The use of TQM in an organization must be based on management’s whole-hearted and constant commitment to quality and the creation of a culture based on these values (*ibid*). In this case, it seems that the principals have the commitment to achieve this goal but have not yet managed to create a culture based on these values. It also seems that they must strengthen the link between systematic quality work and daily work. [Håkansson \(2016\)](#) also found that co-workers at preschools found it difficult to understand this link.

With regard to the methodologies that are desired, seven groups of methodologies and 105 methodologies fall into the group “Develop committed leadership”. This situation could indicate a longing for more focused development of committed leadership, which is viewed as very important for successful work with regard to quality improvement ([Bergman et al., 2022](#)). This finding could be a result of how the questions in the portfolio were worded, but it could also suggest a starting point for creating the desired conditions in which the principals can improve their ability to work with quality development in a systematic way. It is also in

line with for instance [Acker-Hocevar \(2023\)](#) who claim that many principals are poorly prepared to lead from a systemic quality approach.

### Conclusions and implications

Contemporary research on quality in education is dominated by a focus on student outcomes, leaving educators at a loss for how to translate a more systematic orientation to their schools. The language of “quality” is more synonymous with “achievement” rather than meeting the needs of students and society. This study provides a deeper understanding for educators about how to implement the softer aspects of TQM in schools. Findings from this study “unpack” TQM using practical examples in the school setting, which can help educators begin to dialogue and reflect on their methodological practices and how they can be strengthened to achieve quality. It also points to the gap between the quality values/cornerstones in use and what preschool teachers recognize as necessary to achieve quality.

The use of the cornerstone model provides a framework to illustrate the application of TQM in preschools. In so doing, school leaders can better navigate the language of quality as an organizational system to improve the learning environment for all children. This is an important contribution to research on quality that is otherwise dominated by a focus on outcome measures. However, embracing TQM in education is not only the job of school leaders; it is a broader issue that needs to be supported by local and national programming. This study also illuminates challenges leaders face in implementing TQM in an educational system that is already stressed by limited resources, complex needs of children and stakeholders and numerous external reviews and inspections, to name a few. For school leaders to successfully implement TQM requires also that the educational system supporting schools is in line with the values or cornerstones. When educators are faced with navigating internal development with external pressures and control, the possibilities for achieving quality are compromised.

This research is based on answers collected from 18 (out of 21) principals in one municipality in Sweden. Further research could be conducted in other municipalities in Sweden or in other countries. It would also be interesting to investigate co-workers’ perceptions of systematic quality work and compare them with the perceptions of principals. A follow-up study could investigate whether the principals have succeeded in establishing some of the desired methodologies. Another way to continue this research would be to work more closely with the principals to implement the systematic quality work they desire and study the effects on quality at the preschools.

### References

- Acker-Hocevar, M. (2023), “A quantum worldview of responsive power for sustainable learning”, in Snyder, K.J. and Snyder, K.M. (Eds), *Systems Thinking for Sustainable Schooling: A Mindshift for Educators to Lead and Achieve Quality Schools*, Rowman and Littlefield, Lanham, MA, pp. 32-45.
- Bergman, B., Bäckström, I., Garvare, R. and Klefsjö, B. (2022), *Quality: From Customer Needs to Customer Satisfaction*, Studentlitteratur AB, Lund.
- Brodin, J., Hollerer, L., Renblad, K. and Stancheva-Popkostadinova, V. (2015), “Preschool teachers’ understanding of quality in preschool: a comparative study in three European countries”, *Early Child Development and Care*, Vol. 185 No. 6, pp. 968-981.
- Brown, A. (2013), “Quality: where have we come from and what can we expect?”, *The TQM Journal*, Vol. 25 No. 6, pp. 585-596.
- Chen, C., Reyes, L., Dahlgaard, J.J. and Dahlgaard-Park, S.M. (2021), “From quality control to TQM, service quality and service sciences: a 30-year review of TQM literature”, *International Journal of Quality and Service Sciences*, doi: [10.1108/IJQSS-09-2021-0128](https://doi.org/10.1108/IJQSS-09-2021-0128).

- 
- Chisholm, R.F. and Elden, M. (1993), "Features of emerging action research", *Human Relations*, Vol. 46 No. 2, pp. 275-298.
- Coleman, S.Y. (2013), "Statistical thinking in the quality movement  $\pm$  25 years", *The TQM Journal*, Vol. 25 No. 6, pp. 597-605.
- Cooperrider, D.L. and Srivastva, S. (1987), "Appreciative inquiry in organizational life", in Pasmore W.A. and Woodman R.W. (Eds) *Research in Organizational Change and Development*, CT JAI Press, Greenwich, pp. 129-169.
- Dahlgaard, J., Reyes, L., Chi-Kuang, C. and Dahlgaard-Park, S.M. (2019), "Evolution and future of total quality management: management control and organizational learning", *Total Quality Management*, Vol. 30 No. 1, pp. 1-16.
- Dahlgaard-Park, S.M. (1999), "The evolution patterns of quality management: some reflections on the quality movement", *Total Quality Management*, Vol. 10 Nos 4/5, pp. 473-480.
- Dahlgaard-Park, S.M. (2011), "The quality movement: where are you going?", *Total Quality Management and Business Excellence*, Vol. 22 No. 5, pp. 493-516.
- Dale, B.G. (2003), *Managing Quality*, Mass. Blackwell, Malden.
- Deming, W.E. (1994), "The new economics for industry, government, education", Massachusetts Institute of Technology Center for Advanced Engineering Study.
- Ehren, C.M., Altrichter, H., McNamara, G. and O'Hara, J. (2013), "Impact of school inspections on improvement of schools: describing assumptions on causal mechanisms in six European countries", *Educational Assessment, Evaluation and Accountability*, Vol. 25 No. 1, pp. 3-43.
- Foster, S.T. (2004), "Managing quality: an integrative approach", Upper Saddle River, NJ.
- Håkansson, J. (2016), "Organising and leading systematic quality work in the preschool – preschool managers' perspectives", *School Leadership and Management*, Vol. 36 No. 3, pp. 292-310.
- Halinen, I. (2023), "Systems thinking in curriculum development in Finland", in Snyder, K.M. and Snyder K.J. (Eds), *Regenerating Education as a Living System: Success Stories of Systems Thinking in Action*, Rowman and Littlefield Publishers, Lanham, MA, pp. 1-15.
- Hansson, J. and Eriksson, H. (2002), "The impact of TQM on financial performance", *Measuring Business Excellence*, Vol. 6 No. 4, pp. 44-54.
- Hansson, P.-O. and Wihlborg, E. (2016), "Development of quality management in education: a comparative case study in the Swedish multi-level governance system", *IMSC16: Proceedings of the 10th International Multi-Conference on Society, Cybernetics and Informatics, Orlando, FL*, 5-8 July, pp. 43-48.
- Johansson, P.E. and Wallo, A. (2020), "Exploring the work and competence of interactive researchers", *Journal of Manufacturing Technology Management*, Vol. 31 No. 8, pp. 1539-1559.
- Juran, J.M. (1995), *A History of Managing for Quality: The Evolution, Trends, and Future Directions of Managing for Quality*, ASQC Quality Press, London.
- Kanji, G.K. (1990), "Total quality management: the second industrial revolution", *Total Quality Management*, Vol. 1 No. 1, pp. 3-12.
- Kaplani, G. and Zafropoulos, K. (2022), "A model of quality assurance in primary education management. The case of Greece", *Cogent Business and Management*, Vol. 9 No. 1, doi: [10.1080/23311975.2021.2016555](https://doi.org/10.1080/23311975.2021.2016555).
- Khurniawan, A.W., Sailah, I., Muljono, P., Indriyanto, B. and Maarif, M.S. (2021), "The collaborative strategy of total quality management and school governance to improving effectiveness of vocational school-based enterprise", *Journal of Educational and Social Research*, Vol. 11 No. 2, pp. 9-22.
- Lagrosen, S. (2000), "Born with quality, TQM in a maternity clinic", *International Journal of Public Sector Management*, Vol. 13 No. 5, pp. 467-475.
- Lagrosen, Y. (2006), "Values and practices of quality management-health implications and organisational differences", Diss, Chalmers University of Technology.

- Leithwood, K., Harris, A. and Hopkins, D. (2020), "Seven strong claims about successful school leadership revisited", *School Leadership and Management*, Vol. 40 No. 1, pp. 5-22.
- Mann, J. (2023), "Appreciative school systems: a path to school success", in Snyder, K.J. and Snyder, K.M. (Eds), *Systems Thinking for Sustainable Schooling: A Mindshift for Educators to Lead and Achieve Quality Schools*, Rowman and Littlefield, Lanham, MA, pp. 105-119.
- Mårtensson, A. and Snyder, K.M. (2023), "Approaching systems thinking in schools by linking quality and sustainability: Moving from theory to practice", in Snyder, K.J. and Snyder, K.M. (Eds), *Systems Thinking for Sustainable Schooling: A Mindshift for Educators to Lead and Achieve Quality Schools*, Rowman and Littlefield, Lanham, MA, pp. 90-104.
- Mohammad, A. and Rad, M. (2006), "The impact of organizational culture on the successful implementation of total quality management", *The TQM Magazine*, Vol. 18 No. 6, pp. 606-625.
- Murgatroyd, S. and Morgan, C. (1994), *Total Quality Management and the School*, Open University Press, Buckingham.
- Ravitch, D. (2010), *The Death and Life of the Great American School System: How Testing and Choice Are Undermining Education*, Basic Books, New York, NY.
- Scanga, D. and Sedlack, R. (2023), "Networking for principal sustainability", in Snyder, K.J. and Snyder, K.M. (Eds), *Systems Thinking for Sustainable Schooling: A Mindshift for Educators to Lead and Achieve Quality Schools*, Rowman and Littlefield, Lanham, MA, pp. 62-75.
- Shani, A.B., Mohrman, S.A., Pasmore, W.A., Stymne, B. and Adler, N. (Eds) (2007), *Handbook of Collaborative Management Research*, Sage Publications, London.
- Sila, I. and Ebrahimpour, M. (2002), "An investigation of the total quality management survey based research published between 1989 and 2000", *International Journal of Quality and Reliability Management*, Vol. 19 No. 7, pp. 902-970.
- Skolverket (2018), "Curriculum for the preschool: LPFÖ 18", available at: [www.skolverket.se/publikationsserier/styrdokument/2019/curriculum-for-the-preschool-lpfo-18](http://www.skolverket.se/publikationsserier/styrdokument/2019/curriculum-for-the-preschool-lpfo-18)
- Skolverket (2023), "Huvudmannens systematiska kvalitetsarbete", available at: [www.skolverket.se/skolutveckling/leda-och-organisera-skolan/systematiskt-kvalitetsarbete/huvudmannens-systematiska-kvalitetsarbete](http://www.skolverket.se/skolutveckling/leda-och-organisera-skolan/systematiskt-kvalitetsarbete/huvudmannens-systematiska-kvalitetsarbete) (accessed, 30 April 2023).
- Snyder, K.M. (2007), "The European quality benchmark system: helping teachers to work with information to sustain change", *European Journal of Education*, Vol. 42 No. 3, pp. 425-235.
- Snyder, K.M. (2023), "Expanding how we think about quality in education", in Snyder, K.J. and Snyder, K.M. (Eds), *Systems Thinking for Sustainable Schooling: A Mindshift for Educators to Lead and Achieve Quality in Schools*, Rowman and Littlefield Publishers, Lanham, MA, pp. 17-31.
- Snyder, K.J., Acker-Hocevar, M. and Snyder, K.M. (2000), *Living on the Edge of Chaos: Leading Schools into the Global Age*, 1st and 2nd ed., ASQ, A Quality Press.
- Sullivan, E. (2023), "The quantum worldview of responsive power for sustainable learning", in Snyder, K.J. and Snyder, K.M. (Eds), *Systems Thinking for Sustainable Schooling: A Mindshift for Educators to Lead and Achieve Quality Schools*, Rowman and Littlefield, Lanham, MA, pp. 46-61.
- Sullivan, E. and Fitzgerald, J. (2023), "Complexity thinking as a way of living to develop sustainable schooling", in Snyder, K.J. and Snyder, K.M. (Eds), *Systems Thinking for Sustainable Schooling: A Mindshift for Educators to Lead and Achieve Quality Schools*, Rowman and Littlefield, Lanham, MA, pp. 120-134.
- Suriansyah, A. (2017), "Implementation of The total quality management model to support quality of work cultures at primary school teacher education pro-grams in Lampung Mangkurat University Indonesia", *Australian Journal of Basic and Applied Sciences*, Vol. 11 No. 9, pp. 179-186.
- Tienken, C.H. (2020), *The School Reform Landscape Reloaded: More Fraud, Myths and Lies*, 2nd ed., Rowman and Littlefield, Lanham, MA.



Westlund, A. and Löthgren, M. (2001), "The interaction between quality, productivity and economic performance: the case of Swedish pharmacies", *Total Quality Management*, Vol. 12 No. 3, pp. 385-396.

Whitney, D., Trosten-Bloom, A. and Rader, K. (2010), *Appreciative Leadership: Focus on What Works to Drive Winning Performance and Build a Thriving Organization*, The McGraw-Hill.

Zairi, M. (2013), "The TQM legacy—gurus' contributions and theoretical impact", *The TQM Journal*, Vol. 25 No. 6, pp. 659-676.

**Corresponding author**

Ingela Bäckström can be contacted at: [ingela.backstrom@miun.se](mailto:ingela.backstrom@miun.se)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)