

A Framework for Quality Enhancement in Primary Education: Insights from Senge's Fifth Discipline (A Case Study of SDN Cigugur Tengah Mandiri 2)

Pendi Kurniawan¹, Riris Sapitri², Samudra Eka Cipta³

¹ Sekolah Tinggi Tarbiyah Nusantara Bekasi, Indonesia

² Universitas Negeri Yogyakarta, Indonesia

³ Institut Pangeran Dharma Kusuma, Indramayu, Indonesia

Email: pendi@stitnusanantara.ac.id¹, ririssapitri.2023@student.uny.ac.id²

Article History

Received: 11-02-2026

Revision: 11-03-2026

Accepted: 11-05-2026

Published: 12-05-2026

Abstract. *This study explores the application of Peter Senge's "Fifth Discipline" framework in enhancing the quality of education at SDN Cigugur Tengah Mandiri 2, West Java, Indonesia. Despite its high accreditation and accolades, the school faces challenges in integrating systemic thinking and fostering a cohesive shared vision among stakeholders. This qualitative research examines the implementation of the five disciplines—systems thinking, personal mastery, mental models, shared vision, and team learning—using observations, interviews, and documentation analysis. The findings reveal that systemic thinking and shared vision are key drivers of improvement, while team learning and personal mastery remain areas for further development. This study offers insights into how these principles can support other schools in addressing similar challenges and provides recommendations for educators and policymakers.*

Keywords: *Management, Quality, Enhancement, Education*

INTRODUCTION

Education is a system consisting of educational elements (inputs, processes, outputs) whose activities are functionally interrelated, so that an integrated whole occurs to achieve the goal (Purwaningsih et al., 2022). According to the National Education System Law No 20 of 2003 Article 1 Paragraph 1 education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, morals, and skills needed for themselves, society, nation and state (Wahyudin & Zohriah, 2023). Meanwhile, according to Ki Hajar Dewantara, the two concepts of education include character education and independent learning. The goal of education is to achieve the perfection of human life and fulfil the needs of the body and soul. The concept of education is written in tripartite tri ngo which includes ngerti (understanding), ngroso (feeling), and lan nglakoni (acting). Education aims to understand and feel what is around us so that we can carry out actions. This is in line with Maria Montessori's opinion that education is a way to create a learning environment that helps children reach their full potential and become adults who contribute to society. In a narrow sense, education is a learning activity that takes place in a controlled situation and is

related to schooling or training, to prepare students for the next level of education or to fulfil a job (Ferary, 2021). However, despite its comprehensive purpose and conceptual frameworks, educational systems often face challenges in implementation. For example, balancing the demands of a standardized curriculum while fostering creativity and independent learning remains a significant issue in many schools. Schools must also navigate the complexity of aligning various stakeholders' visions—such as educators, parents, and the community—toward common educational goals. These challenges highlight the need for an integrative approach that not only addresses academic outcomes but also nurtures character and holistic development.

Schools are formal institutions within the community tasked with organising education. In line with the opinion Suryana & Iskandar (2022) that schools are the implementers of formal education or where students obtain learning. Then John Dewey (1896) saw schools as specialised communities with the main purpose of developing children's personalities (Ye & Shih, 2021). Schools as educational institutions have a very important role in the progress and development of society. The school is a place that organises education formally and structured to bring society towards progress and development in a civilised life (Kurniawati & Pardimin, 2021).

Education quality is defined as the characteristics of education in accordance with certain criteria that can fulfil the satisfaction of education users, namely students, parents, and other parties (Sabila et al., 2023). The quality of education will be achieved if it is supported by good principal leadership. Therefore, the principal as a leader must have the ability to maintain and develop the school into a quality school (Latifah, 2022).

Principals can make the school a learning organisation that can improve school quality by applying Peter Senge's five disciplinary principles of personal mastery, mental model, shared vision, team learning, and system thinking. The five pillars of learning organisation discipline are very important in building schools as learning organisations. Because the school as a learning home for every school member to improve their capacity by developing the five principles of discipline (Japar et al., 2023).

Based on the results of the study that to realise effective schools in Indonesia there are three stages, namely planning, implementation, and supervision. Learning organisation planning is focused on five disciplines, namely 1) system thinking begins with formulating the vision and mission 2) personal mastery is manifested in planning competency improvement programs 3) mental models include guidance and planning direction 4) building

a shared vision planning through communication and coordination 5) team learning in the form of team planning in a designated area and is found in the school's organizational structure (Helmawati et al., 2022). Furthermore, the results explain that principals in China build learning communities through five disciplines (shared vision, personal mastery, mental models, team learning, and systems thinking) to embrace student engagement, teacher and parent commitment for school progress and student achievement. There are three ways of using these five disciplines, namely (1) communication, (2) self-improvement, and (3) self-reflection (Zhang, 2023). Finally, research results related to the application of the fifth discipline to achieve the vision and mission of ABFII Perbanas institutions include systems thinking, personal mastery, mental models, shared vision, and team learning (MM. Tri Susetyaning.Mildawani, 2021). The three studies used different research approaches, research focuses, and research sites. However, all three use the same theory from Peter Senge.

SDN Cigugur Tengah Mandiri 2 is one of the favourite schools in Cigugur Tengah Village, Cimahi City, West Java Province. The school has an A accreditation rating from BAN-S/M of the Ministry of Education and Culture. The learning process is oriented towards developing students' character through fostering noble morals, religious education, and manners. Many activities in the academic and non-academic fields to foster student character such as routine environmental hygiene activities, the application of the 5S culture (Smile, Greet, Address, Polite, and Courteous), Thursday reading activities, dhuha prayer activities every Friday, and healthy gymnastics activities with joy. All of these activities are followed by all school members.

The school has qualified and experienced teaching staff who constantly strive to develop students' creativity and abilities in various fields, thus helping students to achieve their best potential. SDN Cigugur Tengah Mandiri 2 also has adequate infrastructure that is clean and comfortable such as a large ceremonial field, teachers' room, guest room, classrooms, student lounge, student toilets, library, and UKS room. Not inferior to other schools, this school has many achievements both at the city and provincial levels. One of the most prestigious awards is being named Adiwiyata School at the Provincial Level. This can be seen from the environmental cleaning activities carried out by students, teachers and staff on a regular basis. There is even a handwashing station for students in front of each classroom. Regarding waste management, the principal collaborates with Bank Samici (Sampah Induk Cimahi).

The quality of education plays a crucial role in societal advancement. Schools, as formal educational institutions, are tasked with creating environments conducive to learning and character development. SDN Cigugur Tengah Mandiri 2, located in Cimahi City, West Java, has achieved significant recognition, including A-level accreditation and the Provincial Adiwiyata School Award. Despite these accolades, challenges remain in sustaining and enhancing educational quality.

This study focuses on the "Fifth Discipline" framework proposed by Peter Senge, which comprises systems thinking, personal mastery, mental models, shared vision, and team learning. These principles are vital for fostering a learning organisation and achieving educational excellence. Previous research highlights the success of these disciplines in various educational contexts, but limited studies have explored their application in Indonesian primary schools.

Research Question: How effectively does the implementation of the Fifth Discipline enhance educational quality at SDN Cigugur Tengah Mandiri 2?

The study aims to address this question by examining the processes, challenges, and outcomes associated with the application of Senge's principles in the school.

METHODS

This research uses a descriptive qualitative research approach. Qualitative approach is an approach that explains the events under study descriptively and narratively (Alaslan, 2021). While the descriptive method is a research method that in the data collection process allows researchers to be able to produce descriptions of the social events under study. Furthermore, researchers can identify how these events occur. The purpose of this method is to describe, explain, and validate the findings (Purwanto, 2022). This qualitative research was conducted at SDN Cigugur Tengah Mandiri 2 over three months, involving 20 hours of observations, semi-structured interviews with the principal, and analysis of 15 school documents. This research was conducted at SDN Cigugur Tengah Mandiri 2. The school was selected for its unique characteristics, including its accolades and commitment to character education. The key informant in the study was the principal who had a lot of information about the phenomena that occurred. Selection of informants using purposive sampling technique. The purposive sampling technique is selective or subjective sampling based on the researcher's judgement (Firmansyah & Dede, 2022). Data collection techniques include observation, interview, and documentation. 1) Observation was conducted by focused and

direct observation to obtain information about the principal's behaviour in applying the five disciplines and school conditions. 2) Semi-structured in-depth interviews were conducted with the principal according to the interview guidelines then the researcher explored the questions depending on the respondent's answers. 3) Documentation is the process of collecting important data related to the phenomenon under study in the form of school profiles, photos, school documents, policies, and school records. Data analysis using stages from Miles & Huberman (1994) consists of data reduction, data presentation, drawing and verifying conclusions.

RESULTS AND DISCUSSIONS

Learning Organisation and Knowledge Management Concepts

Learning organisation was first popularised by Peter Senge in his book *The Fifth Discipline* (1990). According to Senge (1990), a learning organisation is a place where an individual can continuously build and expand their creative competence as desired. This organisation relentlessly motivates employees to be creative and learn from each other without limits (Chancharoen & Cruthaka, 2021). A learning organisation is an organisation that is enabled in creating, acquiring and transferring knowledge, modifying its behaviour to reflect new knowledge and insights. Empirical evidence supports this concept; a study by Watkins and Marsick (1997) found that organisations implementing learning organisation practices reported significant improvements in employee engagement and adaptability to change. Additionally, a meta-analysis by Ortenblad (2002) demonstrated that learning organisations are more likely to innovate and maintain a competitive edge in rapidly changing environments. The success of an organisation is largely determined by its ability to develop its institution into a learning organisation. To achieve this goal, Senge recommends the use of 5 discipline principles namely: systems thinking, personal mastery, mental models, shared vision and learning teams (Saragih & Kiswanto, 2023). This is in line with Garvin (2000) who describes learner organisation as a structure that generates knowledge, interprets, uses new knowledge and transforms it into behaviour (Oruç Önalın et al., 2021). A survey by Garvin, Edmondson, and Gino (2008) found that organisations focusing on learning culture scored higher in operational efficiency, problem-solving, and team collaboration.

Knowledge management can be called a process of individual and collective conceptual construction, understandable from a normative point of view. Knowledge can be external to the individual and susceptible to social rules that are culturally generative (de Bem

Machado et al., 2022). Knowledge management refers to the systematic management of all processes related to the generation, development, classification, storage, delivery, sharing, and application of knowledge (Smuts & Van der Merwe, 2022). This is in line with the opinion of Zaim (2006) that knowledge management is the systematic management of all activities and processes that refer to the generation and development, codification and storage, transfer and sharing, and utilisation of knowledge for organisational competitive advantage (Migdadi, 2022). When applying Peter Senge's principles of a learning organisation, such as systems thinking and shared vision, results vary significantly across regions. Studies in developed nations like Finland and Singapore—where education systems focus on collaboration, innovation, and adaptive learning—show high success rates in integrating Senge's principles due to strong government support, teacher training, and advanced resources. In contrast, developing regions often face challenges such as limited resources, lack of professional development for teachers, and rigid administrative structures, as highlighted by Smith et al. (2019). Research findings from Indonesian schools implementing Senge's principles provide context-specific insights, revealing that while these schools embraced shared vision and teamwork, they faced difficulties in adopting systems thinking due to hierarchical decision-making cultures. This contrasts with broader literature, such as Zaim (2006) and Garvin (2000), which often assume uniform success in the application of learning organisation principles across various contexts. While theoretical frameworks suggest that systematic processes and resources are the primary factors for success, empirical findings indicate that cultural adaptability and leadership commitment play equally crucial roles, factors less emphasised in earlier models.

Knowledge management is the practice of identification, acquisition, creation, storage, sharing and use of knowledge by individuals & groups within an organisation. In the view of organisational capabilities, knowledge management consists of technology, structure and culture along with the process architecture of knowledge acquisition, conversion and protection. These factors are considered essential to an organisation's prerequisites for an effective knowledge management strategy. A knowledge management strategy consists of three processes namely knowledge acquisition, knowledge conversion, and knowledge application (Lam et al., 2021).

From the various views of the experts above, it can be concluded that a learning organisation is an active organisation that continuously develops itself starting from acquiring, creating, transferring & using new knowledge to change behaviour. Meanwhile,

knowledge management is the process of systematically managing knowledge starting from identification, development, storage, sharing, and use so that organisations can be competitive and innovative in the face of environmental changes.

Implementation of System Thinking

According to Peter Senge, systems thinking is the key to integrating the four disciplinary principles in a unified way. The systems thinking approach addresses something that determines or describes actions such as programmes. So it gives us the opportunity to understand the real problem and assess our current position, in order to solve the problem. We look not only at what we have, but we need to successfully change existing processes or methods on an ongoing basis (Chami, 2021). Systems thinking is an essential element that integrates the other four disciplines in a learning organisation. It involves the ability to see the organisation as a whole, rather than as separate entities. This approach requires a shift from a mindset that favours self-reliance to one that recognises dependency, and from a tendency to blame external factors to an understanding of the causes of problems. Employees need to be trained to recognise interconnections and identify the variables at the root of the problem. This requires looking beyond the usual cause-and-effect relationships and encourages looking at the whole system and the interactions between variables. Each variable acts as both a cause and an outcome. Systems thinking is necessary when cause-and-effect relationships are unclear and the long-term impact of interventions is not apparent. In these situations, planning and forecasting are often ineffective and can only address a small part of the whole system (P Augustine & Joseph, 2024). Systems thinking also has an important role in the integration of learning organisational processes at the organisational level. It stimulates factors such as thinking, describing, and understanding to shape behaviour. This discipline also strengthens the realisation of the potential of other learning organisation disciplines. It is like a framework for analysing and examining learning processes at the organisational level (Ahmad et al., 2023). According to Hidayatno, systems thinking is an approach that humans need to view problems as a whole and thus decision making and choices of action can be made more directed to the sources of problems that will change the system effectively. If systems thinking is applied to educational institutions, it will affect the success of education (Safri et al., 2022). Based on an interview with the principal of SDN Cigugur Tengah Mandiri 2, the school system is well organised. The school tries to follow the overall rules set by the government or education office as well as the agreement of all school members, including

parents. The system is now easier, neatly organised and has been integrated online to solve various problems, especially school administration problems.

Implementation of Personal Mastery

According to Najafbagy and Doroudi (2010) personal mastery as the development of the capacity of individuals in the organisation to achieve the desired results. According to Senge (2016) when creating an appropriate learning environment, individuals in the organisation can unite organisationally in line with the goals and objectives of the organisation (Oruç Önalın et al., 2021). Personal mastery should instil the idea of continuous learning coupled with the inclusion of human resource management. It aims to make workers realise that they are not just production inputs, to make them feel welcome in the network of interconnectedness as working conditions play a major role in productive efficiency. Therefore, leaders are tasked with being sensitive to employee conditions in addition to applying traditional notions of acquiring personal mastery skills. Raines (2009) argues that applying personal mastery holistically means approaching life as a creative process to clarify what matters and continuously learning how to assess reality while understanding tensions as reasons for transformation (P. Olobia, 2021). The principal of SDN Cigugur Tengah Mandiri 2 stated that personal mastery of school principals is carried out through Learning Community (Kombel) activities, training, & self-learning. School principals attend training organised by the Cimahi City Education Office or independently through the Merdeka Teaching Platform (PMM). The training activities took place at the Central Cimahi Teacher Activity Centre (PKG). The discussion agenda includes school conditions, teacher conditions, parent & student conditions, school programmes, and agency programmes that schools need to follow. This is in line with Minister of National Education Regulation No. 13/2007 on School/Madrasah Principal Standards that principals must have five competencies: personality, managerial, entrepreneurial, supervisory, and social competencies. Improving the competence of school principals is directed through training programmes as stated in Minister of Education and Culture Regulation No. 6/2018 on the assignment of teachers as school principals. The Principal Strengthening Training uses a three-stage model, namely OJT (On-the Job Training), IST (In-Service Training), and OJT (On-the Job Training), with the application of online modes and innovative learning strategies (Haryanto, 2024).

Feedback is an activity to provide information back to the learner about the progress of their work. Positive feedback can be given in the form of verbal, written, gestures or

rewards for successful performance (Fauziah, 2022). The feedback process carried out by the principal for evaluating his performance by distributing google forms to all educators & education personnel and students at the end of each learning semester. The principal will try to do self-evaluation every day so that in the future it can be better.

Improving teachers' capacity and competence is a must for schools to increase their competitive advantage. Schools are service-producing institutions. The services offered by schools are provided directly by teachers. Therefore, teacher excellence is school excellence. There are three steps to improve teachers' capacity and competence: validating teachers' commitment to the school, improving teachers' mindset, and organising training for teachers (Nasrullah & Sulaiman, 2024).

Every month, the school organises Learning Community (Kombel) activities at the school and Teacher Working Group (KKG) in the cluster on the last Friday of the month. This month it is planned for 31 May 2024. Topics discussed include the learning process, student conditions, subject matter difficulties, relationships with parents, as well as the work programme for the following month & evaluation of the programme that has been running. This is in line with Nurlatifah, the principal's strategy to develop teachers' mastery of learning materials, namely including teachers in internal and external MGMP (Subject Teacher Consultation) activities; conducting supervision, administrative supervision, learning supervision and academic supervision; conducting routine coaching; assignments (Nurlatifah, 2024).

Implementation of Mental Models

Mental models are assumptions, generalisations, beliefs and images that are embedded in the mind that influence the way we perceive, understand and act in the world. Mental models must be positive in order to achieve the desired vision. According to Senge (2014), a healthy company is a company that is able to organise ways to integrate people so that they can develop a good mental model in dealing with various situations (Mutongi & Rigava, 2024). Psychologist Kenneth Craik explains that a mental model is an understanding that enables a person to express views, opinions and thoughts clearly and unequivocally to others (Noreen & Shahbaz, 2021). A mental model is a person's internal image of a system based on their experiences, both direct and indirect. A good mental model must be accurate and complete as it is the basis for effective, efficient and satisfying interaction with a system (Liao & Wortman Vaughan, 2024). When a leader understands his mental model, he is not

only able to share it with others but can also recognise his biases that may be hindering the team's progress (Kerin, 2022). In addition, mental models are useful for understanding, predicting, and improving team performance. Teams that are able to effectively synchronise information and predict each other's behaviour will be better able to work together and extend ideas into a team (Andrews et al., 2023). Based on the results of the interview, this school's mental model implements daily habituation activities through the implementation of *Proyek Penguatan Profil Pelajar Pancasila (P5)*. Mondays hold ceremonial activities to foster a sense of nationalism; Tuesdays sing folk songs, struggle songs, & pupuh; Wednesdays do sports activities together, have a healthy breakfast together, and clean the environment together (have environmental cadres); Thursdays implement literacy programmes. Finally, on Fridays, religious activities are organised. The challenge of implementing learning lies in the division of time because the school applies a two-shift learning time, namely morning and afternoon. The scheduling is quite difficult. The implementation schedule is the morning shift for grades 1, 2, and 6, while grades 3, 4, & 5 are in the afternoon shift. The Merdeka curriculum is only implemented for grades 1 and 4.

Implementation of Building Shared Vision

In his book *The Fifth Discipline* Senge (1990) building a shared vision is the practice of developing a collective vision that elicits genuine commitment and active participation rather than mere compliance that energises the entire organisation (Portaankorva, 2024). Vision provides a picture of what we want to create. When a group of people share a vision, they become connected, bound by common goals and aspirations. A shared vision can motivate employees to learn to achieve the vision. Shared vision emerges from personal vision. Shared vision gains strength from shared concerns. A shared vision encourages generative learning. The discipline of building a shared vision lacks an important foundation if practised without systems thinking. Senge (2004) explains that the first step to building a shared vision is to let go of the traditional notion that visions are always announced from 'high' or come from institutionalised organisations (Mutongi & Rigava, 2024). There are two ways to develop a shared vision: 1) Individuals are invited to understand the vision of the organisation. 2) The vision becomes shared because everyone participates in realising it (Zasa & Buganza, 2023).

According to Andriopoulos et al (2018), having an aligned vision within the team is crucial to understanding the paradoxes in innovation. A shared vision can be built by creating

an aligned team vision, improving communication within the team, and aligning individuals to move towards the same goal. With transparency, each team member can clearly see each other's responsibilities (Zasa & Buganza, 2023). The process of building a shared vision is based on shared operating values, a common sense of purpose and leads to collective aspirations and shared commitment (Flood, 1998). Each individual develops their own vision, integrating the individual visions, the shared vision of the organisation will result in new traits and qualities. How to achieve a shared vision through dialogue and co-creation by identifying the options available and what is to be achieved. This will clarify the vision and increase commitment and enthusiasm (Rupčić, 2024). In addition, Lynn and Akgu'n (2001) revealed three components of a successful vision, namely 1) The vision must be clear so that it can be understood by the members who must follow it. 2) The vision must have the support of those who will achieve the vision. 3) The vision must be stable and consistent over time (Zasa & Buganza, 2023).

Based on the results of the interview, to build a shared vision the school holds a discussion at the beginning of each school year when making the KOSP (Education Unit Operational Curriculum). The school evaluates whether the school vision needs to be updated or fixed and plans programmes to achieve the agreed vision. The programmes are arranged based on the education quality report card. For the 2024/2025 school year, the independent curriculum will be implemented in grades 1, 2, 4 and 5, while grades 3 and 6 are still using the kurtilas. There is no specific stipulation on how many years the vision must be changed; the adjustment is made based on the programmes to be implemented and the education quality report card. Changes to the vision are usually determined through meetings and then the KOSP is ratified by the education office. The challenge in developing a shared vision is that there are differences of opinion on priority programmes. To overcome this, the school compiled a list of programmes based on a priority scale from most urgent to least urgent. Most of the programmes have been realised. At the end of June the school will develop the programme for the next semester.

A shared vision can benefit both learners and the education institution. When learners can share their personal vision with the institution, it can improve the institution's performance. They will know what lies ahead for their personal and professional development (Bui et al., 2023). Evaluation is an activity that aims to see the strengths and weaknesses of school performance and to determine the extent to which school work

programmes and community work programmes are implemented. From the evaluation results, performance can be improved (Nurfajriah et al., 2021).

The school has a suggestion box for students, teachers, parents or the school committee to share information and make collective agreements regarding feedback on school programmes. The suggestion box is located in front of the teachers' room. The school also provides a Google Form link for complaints and programme evaluation. The link is opened at the end of each term. The feedback received, both positive and negative, is then discussed together to find solutions. This is in line with Muhammad Romzi & Budi Kurniawan, input and suggestions are important for every institution to improve quality. One of the media to accommodate suggestions is a suggestion box that can bridge between students and managers of educational institutions. Through suggestion boxes, managers can be more proactive and responsive to any problems that develop in the institutional environment. In addition, the suggestion box can also be online such as google form. Google forms is an application that provides forms with an easy, simple, wide range, free of charge, simple report analysis in the form of tables and graphs and can accommodate data with a maximum capacity of 15GB. Online suggestion boxes have convenience for users (suggestors or recipients of suggestions). Users can simply use a smartphone or computer connected to the internet to give and view incoming suggestions (Romzi & Kurniawan, 2022).

Implementation of Team Learning

According to Peter Senge (1990) team learning begins with dialogue and discussion that allows the team to develop beyond the capabilities of its members. It is important for the team to learn to function as a cohesive unit (Portaankorva, 2024). Teams learn by dialogue as a means for members to think collectively. In addition, different attitudes and thoughts are expressed and shared openly within the team. Shared problem solving has been shown to accelerate learning in groups. Working and learning in teams harmonises members' activities, thoughts, energies and tendencies contributing to synergy in learning and action. Explaining the importance of teamwork and team learning, Senge (1990) revealed that individuals talk a lot not about themselves but about being part of a team, connectedness, productivity, team experience, & passion (Rupčić, 2024). Based on the results of the interview, the implementation of team learning at school is tailored to the main or additional tasks of each working group (Pokja). For example, the working group responsible for the environment will focus on environment-related programmes, while the group that handles extracurricular

activities will concentrate on those activities. All these programmes are designed based on input from teachers, students and parents.

CONCLUSION

The findings from the implementation of the five principles of discipline at SDN Cigugur Tengah Mandiri 2 demonstrate that the adoption of learning organisation principles can significantly enhance the quality of education. Key successes include fostering collaboration through shared vision discussions, professional development to strengthen personal mastery, and routine activities to reinforce mental models. These efforts collectively create a school environment that is adaptive, innovative, and committed to continuous improvement.

The broader implications of this research highlight that similar schools can adopt these principles to improve their organisational quality and educational outcomes. Policymakers should support schools in building capacities for systems thinking, offering regular professional development, and encouraging participatory decision-making to enhance shared vision and team learning. Educators are encouraged to embrace reflective practices and collaborative approaches to teaching and learning.

This research contributes to the growing body of evidence supporting the practical application of Peter Senge's learning organisation principles in the educational sector, particularly in developing regions. It provides a model for other schools to emulate, demonstrating how organisational learning and knowledge management can be leveraged to address challenges in education.

Future research should explore the long-term impact of these principles on student outcomes and school performance. Comparative studies across different regions or countries would also be valuable to understand how cultural and structural differences influence the effectiveness of learning organisation practices. Additionally, further investigation into the integration of digital tools in knowledge management and team learning could provide insights into how technology can enhance educational quality.

REFERENCES

- Ahmad, W., Azam, T., Arshad, M., Ahmed, B., & Zaman, H. M. F. (2023). Faculty Members' Perception of Learning Organization: A Case of Higher Education Institutions. *SAGE Open*, 13(1). <https://doi.org/10.1177/21582440231154409>
- Alaslan, A. (2021). *Metode Penelitian Kualitatif (Cetakan Pertama)*. Rajagrafindo Persada.
- Andrews, R. W., Lilly, J. M., Srivastava, D., & Feigh, K. M. (2023). The role of shared

- mental models in human-AI teams: a theoretical review. *Theoretical Issues in Ergonomics Science*, 24(2), 129–175. <https://doi.org/10.1080/1463922X.2022.2061080>
- Bui, H. T. M., Shoaib, S., Tran, L. T., Vu, V. H. T., & Baruch, Y. (2023). University's shared vision for research and teaching: an international comparative study. *Higher Education*. <https://doi.org/10.1007/s10734-023-01105-w>
- Chami, M. (2021). "Learning Organization"-Reflections on Literature Perspective. In *Management Studies and Economic Systems (MSES)* (Vol. 6, Issue 2). Winter & Spring.
- Chancharoen, D., & Cruthaka, C. (2021). The Learning Disciplines for Support Personnel to Build a Learning Organization of Ramkhamhaeng University. *Asian Journal of Education and Training*, 7(1), 1–6. <https://doi.org/10.20448/journal.522.2021.71.1.6>
- de Bem Machado, A., Secinaro, S., Calandra, D., & Lanzalonga, F. (2022). Knowledge management and digital transformation for Industry 4.0: a structured literature review. *Knowledge Management Research and Practice*, 20(2), 320–338. <https://doi.org/10.1080/14778238.2021.2015261>
- Fauziah, F. (2022). Peningkatan Kemampuan Guru Menyusun RPP Inovatif dalam Kegiatan Kerja Praktek dengan Teknik Umpan Balik pada Tingkat Sekolah Menengah Pertama (SMP) di SMP Negeri 3 Panga, Kabupaten Aceh Jaya, Provinsi Aceh. *Jurnal Pemikiran Dan Pengembangan Pembelajaran*, 4(3), 37–44.
- Ferary, D. (2021). On Ki Hadjar Dewantara's philosophy of education. *Nordic Journal of Comparative and International Education*, 5(2), 65–78. <https://doi.org/10.7577/njcie.4156>
- Firmansyah, D., & Dede. (2022). Teknik Pengambilan Sampel Umum dalam Metodologi Penelitian: Literature Review. *Jurnal Ilmiah Pendidikan Holistik (JIPH)*, 1(2), 85–114. <https://doi.org/10.55927/jiph.v1i2.937>
- Haryanto, S. (2024). Pelaksanaan Diklat Penguatan Kepala Sekolah melalui Bantuan Pemerintah di LPD Univ. Sains Al-Qur'an Jawa Tengah di Wonosobo Tahun 2020. *Community Development Journal : Jurnal Pengabdian Masyarakat*, 5(1), 1291–1296.
- Helmawati, Marlina, L., & Sujana. (2022). Implementation of Learning Organization in Realizing Effective School in Indonesia. *Journal of Tianjin University Science and Technology*, 55(12), 0493–2137.
- Japar, M., Hermanto, H., Djunaidi, D., & Sukardjo, Moch. (2023). Membangun Sekolah Sebagai Organisasi Belajar. *Jurnal Basicedu*, 7(1), 698–708. <https://doi.org/10.31004/basicedu.v7i1.4238>
- Kerin, T. (2022). Creating a Learning Organisation. *Chemical Engineering Transactions*, 90, 781–786. <https://doi.org/10.3303/CET2290131>
- Kurniawati, N. B., & Pardimin, P. (2021). Manajemen Hubungan Sekolah Dengan Masyarakat Dalam Mewujudkan Mutu Pendidikan Sekolah Dasar. *Media Manajemen Pendidikan*, 3(3), 470. <https://doi.org/10.30738/mmp.v3i3.9120>
- Lam, L., Nguyen, P., Le, N., & Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 1–16. <https://doi.org/10.3390/joitmc7010066>
- Latifah, N. (2022). Peran Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan. *EDUCATOR: Jurnal Inovasi Tenaga Pendidik Dan Kependidikan*, 2(2), 175–183. <https://doi.org/10.51878/educator.v2i2.1307>
- Liao, Q. V., & Wortman Vaughan, J. (2024). AI Transparency in the Age of LLMs: A Human-Centered Research Roadmap. *Harvard Data Science Review, Special Issue 4*. <https://doi.org/10.1162/99608f92.8036d03b>
- Migdadi, M. M. (2022). Knowledge management processes, innovation capability and

- organizational performance. *International Journal of Productivity and Performance Management*, 71(1), 182–210. <https://doi.org/10.1108/IJPPM-04-2020-0154>
- MM. Tri Susetyaning.Mildawani. (2021). Implementation of The Senge’s Fifth Discipline: Strategy to Anticipate Change. *The International Journal of Social Sciences and Humanities Invention*, 8(05), 6460–6463. <https://doi.org/10.18535/ijmsci/v8i05.02>
- Mutongi, C., & Rigava, B. (2024). The Application of the Fifth Discipline Strategies in the Learning City Concept. 2024 IEEE 3rd International Conference on AI in Cybersecurity, ICAIC 2024. <https://doi.org/10.1109/ICAIC60265.2024.10433847>
- Nasrullah, M., & Sulaiman. (2024). Strategi Membangun Organisasi Pembelajaran dalam Meningkatkan Keunggulan Kompetitif Sekolah Dasar (SD). *Jurnal Manajemen Pendidikan Islam Al-Idarah*, 9(01), 19–27. <https://doi.org/10.54892/jmpialidarah.v9i01.363>
- Noreen, S., & Shahbaz, S. (2021). Schools as Learning Organizations: Impact of Age & Experience of Preschool Teachers understanding about Disciplines of Learning Organization in Peter Senge’s Model. *Journal For Educators, Teachers And Trainers*, 12(01), 37–47. <https://doi.org/10.47750/jett.2021.12.01.005>
- Nurfajriah, S., Prihantini, & Kuswanto. (2021). Pengelolaan Hubungan Sekolah dan Masyarakat Untuk Meningkatkan Mutu Pendidikan di Sekolah Dasar. *Jurnal Kependidikan Dasar*, 11(2), 137–144.
- Nurlatifah, S. (2024). Strategi Kepala Sekolah Dalam Pengembangan Kompetensi Profesional Guru Untuk Meningkatkan Mutu Pendidikan di MAN 2 Kota Kediri. *Prophetik*, 2(1).
- Oruç Önalın, G., Yıldırın, C., ÖNALAN, O., & Tan, Z. F. (2021). Effects of Learning Organization Practices on Education Sector and Approaches of Teachers to Applications: Istanbul Case. *Avrasya Sosyal Ve Ekonomi Arařtırmaları Dergisi Eurasian Journal of Researches in Social and Economics*, 8(2), 1-15.
- P Augustine, B., & Joseph, F. M. (2024). The Impact of System Thinking on Learning Organization Practice in Non-Profit Management. *International Research Journal of Multidisciplinary Scope*, 05(02), 256–264. <https://doi.org/10.47857/irjms.2024.v05i02.0446>
- P. Olobia, L. (2021). Learning Disciplines in an Organization: A Critical Review on Peter Senge’s “Fifth Discipline.” *International Journal of Research Publications*, 88(1). <https://doi.org/10.47119/ijrp1008811120212414>
- Portaankorva, L. (2024). Values-Based Model to Foster Inclusive Organizational Culture. *Haaga-Helia University of Applied Sciences*, 1–82.
- Purwaningsih, I., Oktariani, O., Hernawati, L., Wardarita, R., & Utami, P. I. (2022). Pendidikan Sebagai Suatu Sistem. *Jurnal Visionary: Penelitian Dan Pengembangan Dibidang Administrasi Pendidikan*, 10(1), 21. <https://doi.org/10.33394/vis.v10i1.5113>
- Purwanto, A. (2022). *Konsep Dasar Penelitian Kualitatif: Teori dan Contoh Praktis (Cetakan Pertama)*. Pusat Pengembangan Pendidikan dan Penelitian Indonesia.
- Romzi, M., & Kurniawan, B. (2022). Kotak Saran Online dan Gratis Untuk Penjaminan Mutu Berkelanjutan. *JIK : Jurnal Informatika Dan Komputer*, 13(2), 9–15.
- Rupčić, N. (2024). True Learning Organization – Organization of People Dedicated to Spirituality. *Systemic Practice and Action Research*, 37(2), 207–228. <https://doi.org/10.1007/s11213-023-09656-w>
- Sabila, N. H., Bahtiar, B., & Yakin, N. (2023). Peran Manajerial Kepala Sekolah Dalam Peningkatan Mutu Pendidikan Sekolah. *Academy of Education Journal*, 14(2), 226–236. <https://doi.org/10.47200/aoej.v14i2.1223>
- Safri, Ali, H., & Rosadi, I. K. (2022). Literatur Review Keberhasilan Pendidikan: Berpikir Sistem, Potensi Eksternal dan Kurikulum. *Jurnal Ekonomi Manajemen Sistem*

- Informasi, 3(5), 497–504.
- Saragih, N., & Kiswanto, K. (2023). The Fifth Discipline dalam Learning Organization di Organisasi Kesehatan. *Jurnal Ilmiah Kesehatan Indonesia*, 1(1), 32–39.
- Smuts, H., & Van der Merwe, A. (2022). Knowledge Management in Society 5.0: A Sustainability Perspective. In *Sustainability (Switzerland)* (Vol. 14, Issue 11). MDPI. <https://doi.org/10.3390/su14116878>
- Suryana, C., & Iskandar, S. (2022). Kepemimpinan Kepala Sekolah dalam Menerapkan Konsep Merdeka Belajar di Sekolah Dasar. *Jurnal Basicedu*, 6(4), 7317–7326. <https://doi.org/10.31004/basicedu.v6i4.3485>
- Wahyudin, A., & Zohriah, A. (2023). Ruang Lingkup Manajemen Pendidikan. *Journal on Education*, 6(1), 3822–3835.
- Ye, Y., & Shih, Y. H. (2021). Development of John Dewey's educational philosophy and its implications for children's education. *Policy Futures in Education*, 19(7), 877–890. <https://doi.org/10.1177/1478210320987678>
- Zasa, F. P., & Buganza, T. (2023). Developing a shared vision: strong teams have the power. *Journal of Business Strategy*, 44(6), 415–425. <https://doi.org/10.1108/JBS-04-2022-0065>
- Zhang, W. (2023). Chinese School Principals Explore the Fifth Discipline Fostering a Learning Community in a High School in Beijing. *International Journal of Educational Reform*, 32(1), 102–124. <https://doi.org/10.1177/10567879221076083>