



Tacit knowledge sharing to improve teachers' performance

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ABSTRACT

In the current industrial revolution 4.0 era, teachers are required to constantly develop themselves and improve their performance. This is because teachers are the frontliners who directly interact with students. Teachers are one of the spearheads in educational institutions that determine student success. Teachers who are of superior quality will certainly give their best performance. Therefore, this study aims to analyze how teachers are able to exploit the knowledge and skills that exist in themselves by optimizing all sources of knowledge around them through knowledge sharing activities among teachers, particularly tacit knowledge sharing so that they can improve their performance. The methodology used in this research is a systematic approach with the Systematic Literature Review method with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analysis) model from articles published from 2012 to 2022. Based on the results of these studies, it is learnt that knowledge sharing activities among teachers will encourage individual knowledge improvement and produce new knowledge as a process of exchanging knowledge both implied and explicit from each individual.



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INTRODUCTION

The rapid development of Information and Communication Technology (ICT), which characterizes the Industrial Revolution 4.0 era, has affected people's habits and lifestyles. The convenience and speed offered make life faster, freer, and interconnected so that multiculturalism and globalization have become part of everyday life. These habits, skills, and diversity of experiences form knowledge and become expertise gained from learning or innate processes (Vina Shabrina, et al, 2015). From the knowledge formed, it can basically be divided into two (2) types, namely explicit knowledge and tacit knowledge.

Tacit knowledge is different from explicit knowledge, which is the knowledge that can be stated formally and is objective because it can be clearly seen and can be documented. Masri (2018) explains that this knowledge is usually stored in reports in knowledge repositories. Stored knowledge can also be absorbed and digested easily (Sousa & Rocha, 2019). This knowledge is widespread and can be obtained in schools (Afsar, Masood & Umrani, 2019); Lombardi (2019). Meanwhile, tacit knowledge can be defined as skills and perceptions that are built by individuals in their minds and can be seen through attitudes and behaviors, motivation, and commitment (Anand, 2010; Jasimuddin et al., 2005; Nikolić & Natek, 2018).

In connection with the role of educational institutions as knowledge centers, educational institutions, especially schools, need to ensure that every member of the organization, especially teachers, can increase their knowledge. Therefore, knowledge sharing is important for an educational institution so that it can create, distribute knowledge and apply it to the organization. Knowledge-sharing activities will help the process of integrating knowledge between individuals into a knowledge organization. And when an institution can maximize the exploitation of knowledge from each of its human resources, then the institution will achieve an optimal level of excellence and competitiveness.

Why should knowledge sharing be managed so that it can become organizational knowledge? This is because there is a tendency to separate and compartmentalize knowledge in educational institutions. This tendency, according to Yuliazmi (2005), means that existing knowledge is local and separate. In fact, knowledge sharing can flow knowledge into all lines of the organization so that they can share knowledge with each other. Yuliazmi explained that knowledge-sharing activities can be carried out by mapping knowledge and providing opportunities to communicate with coworkers in a relaxed atmosphere in an effective workspace and environment. Yuliazmi also added that there is a need for knowledge-sharing activities such as discussion forums or experience exchange activities.

Several studies indicate that a problem that often occurs in managing knowledge in educational institutions is that knowledge sharing has not yet become a habit and willingness. Reluctance to share knowledge causes differences in knowledge in each individual contained in an educational institution, especially in the teacher who creates the knowledge to be greater. This can lead to differences in the weight or quality of the material delivered. For example, if there are 2 teachers teaching parallel classes on a subject who have different knowledge, skills, and experiences, and there is no communication of knowledge, of course, the way of delivering and presenting teaching materials will be different. This can cause the learning experience in one class to be different from the other so that learning outcomes are likely to be different. In other words, the knowledge of teachers, especially those who teach the same subject, is less developed. Huie et.al. (2020) stated that poorly communicated knowledge is the cause of unsatisfactory work performance.

Based on the description above, the study in this research is focused on tacit knowledge-sharing behavior contributing to performance improvement, especially for teachers as the front liners of Indonesian education. Previous research has found a positive relationship between the influence of tacit knowledge sharing and performance (Asbari & Novitasari, 2020); (Carol P. Huie et al, 2020); (Wati & Zakaria, 2018) The results of this study are expected to optimize the benefits of sharing knowledge between teachers, not only explicit knowledge but also tacit knowledge.

METHODS

The method used in this research was a literature review using the PRISMA model Systematic Literature Review method from international articles and national articles and textbooks. The articles in the study were relevant to the keywords Knowledge, Knowledge Sharing, Tacit Knowledge, Performance Improvement, and Teacher Performance with references published from 2012-2022, sourced from www.jstor.org, <https://www.emerald.com/insight/>, <https://eric.ed.gov/>, <https://www.researchgate.net/>, <https://www.tksi.org/>, and <https://onlinelibrary.wiley.com/>. Then the author screened the title and abstract of the journal article. Preferred Reporting items for Systematic Review and Meta-Analysis (PRISMA) is a detailed and exhaustive stage in the literature review, which consists of 5 steps, namely: (1) defining eligibility criteria, (2) defining information sources, (3) literature selection, (4) data collection, and (5) data item selection.

RESULTS AND DISCUSSION

Results

Based on the results of searching articles using the PRISMA model Systematic Literature Review method from international articles and national articles and textbooks, the articles in the study were relevant to the application of the approach. Based on the literature found, this study found the influence of tacit knowledge-sharing on teachers' performance where this performance can be seen and measured based on specifications or competency criteria that must be possessed in the learning process activities that begin with planning activities, implementing a quality learning process and assessing and evaluating learning outcomes. The main task of the teacher which is realized in teaching and learning activities is a form of teacher performance.

Knowledge Management

Drucker in Mahyarni (2014) also suggests that the key to success in improving the welfare and quality of individuals and work groups in organizations is the discovery and deepening of knowledge owned by each individual. Perceptions of knowledge management may vary but the ultimate goal is to share and acquire knowledge. Knowledge involves collecting, structuring, storing, and accessing information to build knowledge. Hence, managing Knowledge Management is not easy in an organization. Wulantika (2017) explained the need for four basic pillars, namely (1) knowledge creation, which is born from creativity and innovation through a scientific study process carried out in a structured and systematic manner, (2) knowledge transfer which is a process of equalizing knowledge between individuals in the organization through two-way communication, (3) knowledge use, (4) knowledge storage, the stage of using and storing knowledge that has been tested and validated for future needs. Nonaka (2007) classified the concept of Knowledge Management in a simple way so that it can be easily understood in two categories, namely tacit knowledge and explicit knowledge.

Tacit Knowledge

Tacit knowledge is the knowledge that is highly personalized and stored in the human mind (Chen, 2001; Perez-Fuillerat et al., 2018), not easy to describe and share naturally (Wang & Liu, 2019) so it requires personal interaction in the process of transforming the knowledge (Lee, 2019). A person's actions and experiences, including values, ideals, and emotional states are internalized into tacit knowledge (Hartley, 2018). Therefore, tacit knowledge belongs to individual or personal knowledge (Nonaka & Toyama, 2015; Munoz et al., 2015; Wang et al., 2016; Jou et al., 2016; Rothberg & Erickson, 2017) and transform it requires personal interaction.

In more detail, the relationship between tacit knowledge and experience is not fully known, but it is possible that individual characteristics such as intelligence, personality, prior knowledge, and psychological conditions such as a way of thinking may have an impact on the process of acquiring tacit knowledge. For this reason, schools are expected to encourage and provide support in the management and use of tacit knowledge with an embedded approach and sharing activities (Ma et al, 2018) so that everyone in the school education institution will have a solid knowledge base.

In addition, Sangkala (2007) in Sulistiyo et al. (2021) divided tacit knowledge into two indicators, namely:

1. Technical Indicators are highly subjective knowledge that individuals have that is intuitive, conjecture, and the ability to understand something, the experience that can lead to inspiration. This indicator is often a "Know-how" approach which is the ability to analyze knowledge with theoretical content applied in an effective decision.
2. Cognitive This indicator refers more to the individual's reality and vision in the future which is realized in the form of expressions of ideals, values, perceptions, confidence, emotions, and mental models that are difficult to translate or articulate. This indicator is a "Know-what" approach which is knowledge obtained by conducting learning and training activities.

Knowledge Sharing Activity

Knowledge management, according to Syeiby, in Reniati (2018) was described as the art of shaping the value of intangible assets. Art in this case is likened to a system in an educational institution that is used to absorb the knowledge, experience, and creativity of employees to improve organizational performance. Apart from the above definition, knowledge sharing can be said to be an interpersonal communication activity through communication and the acceptance of knowledge from others, (Chen, 2001), this statement is also in line with the definition of knowledge sharing as a culture of social interaction where there is an exchange of knowledge, experience, skills, etc. (Lin, 2007 and Pasaribu, 2009).

However, the knowledge that organizations need to thrive is largely tacit and deep-rooted and not easy to recognize because 90% of knowledge in Huie, et.al. (2020) is embedded in individual heads. Therefore, it is necessary to create conditions that trust each other and share information and knowledge so that everyone feels comfortable sharing knowledge and experience. This is in line with Huie, et.al., (2020) who state that trust and collaboration are important factors in *knowledge sharing*. To create an organizational culture that can encourage the sharing of tacit knowledge, it is necessary to build trust. This trust is more than a statement of expression of feelings for belief in someone. Lin (2007) asserts that this trust consists of ethical behavior, competence, reliability, and integrity. These factors are integrated into the workplace when the organization sets precedents, enforced through management's behavior with employees, and enhanced through coworker interactions.

Impact of Tacit Knowledge on the Organization / Educational Institution

Salleh (2014) stated that tacit knowledge that is well managed through knowledge management will affect the success of learning organizations and the integration of learning organizations with tacit knowledge can increase skills/expertise, individual learning interest in new skills, innovation, and process improvement. Huie, et.al. (2020) confirmed that the existing literature consistently shows that tacit knowledge-sharing behavior plays an important role in work performance by increasing knowledge distribution for better productivity. In addition, this knowledge-sharing behavior also contributes to the organization as a *learning organization* so that it can improve its performance. In addition, Ngah & Jusoff (2009) in their research also showed that new products and services can be improved by sharing tacit knowledge.

Discussion

Knowledge Sharing Management

Krumova and Milanez (2014) stated that the knowledge-sharing process involves both the source and the recipient of knowledge. Successful knowledge-sharing activities are more than just focusing on transferring specific knowledge but rather focusing on structuring and implementing arrangements that bridge existing and potential relationship issues. How are knowledge-sharing activities implemented? Subagyo (2007) provided several forms of activities to implement knowledge-sharing activities such as meetings, seminars, workshops, forums, and internship programs. Subagyo also reminded the importance of documentation of activities such as publications on websites, newsletters, magazines, and newspapers. With the continuous communication of information through electronic discussions such as teleconferences, emails, blogs, and discussion forums, it is expected that the spread of thoughts and knowledge can occur widely and quickly. Educational institutions, according to Vina Shabrina et.al. (2015), maintained knowledge sustainability and became an institution as a knowledge center, teachers are expected to make knowledge-sharing part of their activities at school and become a habit. Unfortunately, there are several obstacles faced by institutions in sharing knowledge.

Cheng (2009) also added that in addition to the absence of habituation, educational institutions also do not know the ways or systems that can facilitate this activity. Even Armstrong and Mahmud (2008) stated that how to facilitate teachers to gain tacit knowledge is still an important question in educational institutions. In addition, according to research in educational institutions in Bangladesh, according to Azuddin et.al. (2009) in Rahman et.al. (2018), the majority of staff consider that knowledge-sharing behavior through formal discussions was a threat, in which they were afraid of losing face and credibility when they had face-to-face interactions. Whereas according to Mark W. Mcelroy (2000), knowledge-sharing behavior with fellow professionals in one institution would accelerate the increase in personal knowledge which will encourage the ability to create new knowledge that is beneficial to the institution. Rahman et.al. (2018) quoting from Bock et al., (2005); Dong et al., (2017); Tippins, (2003) stated that researchers and decision-makers agree that tacit knowledge sharing carried out intensively with colleagues can help each to make the right decisions and can maintain long-term organizational sustainability so that everyone in the organization applied knowledge sharing with their colleagues to improve skills in decision making and problem-solving.

Based on the research results above, it can be found that there is a relationship between giving and receiving information or knowledge. This give-and-take relationship is referred to by Hoof and Ridder (2004) as the knowledge donating and knowledge collection dimensions. Knowledge donating is the process of knowledge transfer, which means exchanging and communicating with others to share knowledge and experience, while knowledge collection is the process of collecting knowledge and experience from the communication and discussion that occurs.

Knowledge Conversion Process in Knowledge Sharing

After knowledge is obtained through knowledge sharing activities, according to Sholeh (2011), the next process was the knowledge conversion process. The conversion process in knowledge sharing occurred through four (4) stages known as the SECI Process, namely Socialization, Externalization, Combination, and Internalization. Knowledge conversion was the life cycle and development of knowledge. This is reinforced by Nonaka and Takeuchi in Krumova and Milanez (2014), who stated that tacit knowledge sharing is one of the phases of the SECIO Model where the model explains how knowledge conversion occurs through an iterative process and spiral of socialization, externalization, combination, and internalization known as SECI as an effective means of making individual tacit knowledge available to the wider organization to create new knowledge and then apply the new knowledge in their business processes to achieve their business processes.

The new knowledge in their business processes to achieve the organization's vision, goals, and performance standards. The SECI model includes: sharing tacit knowledge

(Socialization); creating new concepts (Externalization); justifying concepts (Externalization leads to Combination); building archetypes (Combination); cross-level knowledge (Combination); learning and acquiring new tacit knowledge (Internalization). The same model was also developed by Huysman (2002) as cited in Zaffar and Ghazawneh (2012) which illustrates this process as a knowledge-sharing cycle described as 3 processes namely Internalization, Externalization, and Embodiment to formulate the organizational learning process.

Success Indicators of Knowledge Sharing Activity

When the dimensions of knowledge-sharing activities are recognized and the implementation has been well managed, the tacit knowledge transferred is converted into explicit knowledge, educational institutions need to conduct an evaluation of the assessment of these activities. The successful implementation of knowledge sharing can be measured through five (5) types of knowledge generated from the knowledge conversion process, namely (a) Embrained knowledge such as conceptual skills and cognitive abilities, (b) Embodied knowledge is obtained through learning by doing activities such as fieldwork, interviews, writing, and other qualitative methods, (c) Encultured knowledge, namely knowledge with affective and cognitive structures used to perceive, (d) Embedded knowledge which is the collective form of tacit knowledge embedded in organizational routines, practices, values, norms and shared beliefs such as company-specific routines and procedures, etc. and Encoded knowledge is the knowledge that has been codified and is explicit in the form of books, work guidelines, job descriptions, etc. (Matzler, et al, 2008).

The Effect of Tacit Knowledge Sharing on Improving Teachers' Performance

Continuous efforts to improve teachers' performance through education and training are a necessity. According to Asbari & Novitasari (2020), it needed to be adjusted to the key performance indicators so that there is a benefit between knowledge and work. Wingerden (2015) stated that performance refers to the implementation of work. Performance in terms of the role is defined as the results and behavior that are expected directly to achieve organizational goals. The definition of performance in a broader sense explained by Arifin (2015) is not only seen from the results of work but also from how the work process is carried out. This is further explained by Mangkunegara (2017: 67) where performance came from the word job performance or Actual Performance, namely work performance or actual performance achieved by a person. The definition of performance is the quality and quantity of work achieved by a worker in carrying out his duties in accordance with the responsibilities given to him.

And according to Chow (2012) in the same study added that work performance would be better if there is a knowledge-sharing process as a form of desire to learn from others. The knowledge that is shared is not only explicit knowledge but also tacit knowledge which is even very instrumental in improving performance, especially teachers. Michael Polanyi based on the research results of Argyris, 1999; Wagner & Sternberg, 1987 proved that tacit knowledge is a differentiating factor that drives the success of leaders.

CONCLUSION

Training and education activities are perceived as receptive activities or receiving knowledge and skills so that they must be internalized and combined with existing knowledge in order to produce new knowledge. Knowledge-sharing activities through socialization and externalization will strengthen understanding and facilitate the development of new knowledge. Therefore, educational institutions need to involve all teachers in explicit and tacit knowledge activities. Utilizing tacit knowledge through knowledge sharing of teachers will encourage teachers to share knowledge and a culture of learning so that educational institutions can become more creative and innovative and lead. This will certainly improve teacher performance.

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