The Significance of Knowledge Management in Reaching the Fourth Sustainable Development Goal (SDG-4) and Enhancing Teacher Professionalism

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Abstract: The goal of management in this twenty-first century is elevating the effectiveness of knowledge work and knowledgeable humans (knowledge workers) as the most valuable assets by utilizing intellectual capital in the knowledge management process. This research highlights the important role of knowledge management as an integral strategy that supports the collection, management, storage, and dissemination of knowledge to maximize teacher potential through increasing academic qualifications and teacher competence in achieving SDG-4 (Quality Education). This research used qualitative methodologies combined with descriptive approaches and a systematic literature review (SLR). The review process identifies relevant studies published in academic databases and scholarly journals limited to the past ten years (2013-2024). The findings of this research indicate that knowledge management contributes to facilitating collaboration between teachers, providing quick access to quality educational resources, and improving continuous learning. The application of knowledge management helps to accelerate the professionalism of teachers through personalized, evidence-based training, facilitate the transfer of experiences and best practices, and improve the curriculum's acceleration and learning methodologies. In conclusion, this study shows that knowledge management significantly contributes to achieving SDG-4 and enhancing the quality of teacher professionalism, emphasizing the importance of efficient knowledge management practice in realizing the goal of inclusive, equitable, high-quality education and providing possibilities for lifelong learning for everyone.

Keywords: Knowledge management, Sustainable development goal, Quality education

Introduction

Currently, in the era of personalization of technology, which is often referred to as the era of super-smart society (society 5.0), the role of information and knowledge of each person is needed in every organization, including in the world of education. The better the quality of education in a country, the more developed the country is. Conversely, the worse the quality of a country's education system, the more backward the quality of that country. As former South African President Nelson Mandela said, "Education is the most powerful weapon that you can use to change the world" (World Population Review, 2023), which means that good education will be able to conquer various challenges of world development.

Based on the 2023 International Education Database, which measures the quality of a country's education based on its influence on improving the economy, social environment, and fulfilling the Sustainable Development

Goals (SDGs), Indonesia is ranked 67th out of 203 countries in the world (Worldtop20.org, 2023). The quality of education is assessed based on a survey of three things: the developing education system, consideration of the eligibility of students who will enter university, and consideration of educational institutions that provide top-quality services (Zulfah, 2023).

Quality educational institutions are supported by all resources that have an interest in and are responsible for educational institutions. All the resources that support the learning process and improve the quality of educational institutions are human resources (man), financial resources (money), and other infrastructure materials (material) (Tuala, 2018). Quality educational institutions mention several important elements, namely the quality of learning materials, the quality of teachers, student management, educational institutions that have unique advantages, and the instillation of institutional values that create pride in their alma mater (Effendy, 2009) (Kemenko PMK, 2020). So in this case, educators have a large and significant role in building a learning atmosphere culture in accordance with the educational goals.

Human resources, which are one of the benchmarks for the quality of educational institutions, are the quality of students. According to the Director of Professional Education and Development of Teachers and Education Personnel, there are three important things that must be pursued to achieve quality education: increasing student participation outcomes, expanding access to educational services so that they can reach children of learning age who have special obstacles, and reducing the gap in the quality of educational institutions in each region (Praptowo et al., 2020). The quality of educational institutions also refers to the results achieved by students (students' achievement), both in academic and non-academic terms, such as arts, sports, or values that can be adhered to, such as discipline, respect, cleanliness, safety, and other positive values (Tuala, 2018).

Every educational institution in Indonesia has a School Education Quality Assurance Team (TPMPS) whose role is to ensure quality in curriculum preparation which shows that there is a formal mechanism to monitor and improve the quality of education as a key element in the quality management of educational institutions by involving internal stakeholders, main customers (students), and secondary customers (parents, industry, and society) in the curriculum development process emphasizes the importance of broad participation in improving the quality of education (Meirani et al., 2023). The learning practices carried out by each individual educator have different characteristics, such as in terms of teaching experience, knowledge exploration, mastery of technology, modernity, and so on. So that each individual in an educational institution has the same vision and mission and can provide new ideas that can broaden each other's insight, a knowledge management role is needed.

Knowledge management includes the process of collecting, storing, distributing, and utilizing knowledge to achieve educational goals (Sedarmayanti, Listiani, & Mulyaningsih, 2020). Knowledge management is a practice that focuses on collecting, storing, using, and sharing knowledge within an organization from the right people at the right time so as to create effective and efficient policies to create organizational value (The American Productivity & Quality Center (APQC), 2023). Effective knowledge management can increase an organization's competitive advantage and develop the intelligence or expertise of its human resources. One of the unique resources needed to win the competition is knowledge (Mulyanto, 2008). The quality of educational institutions depends on how knowledge is managed and used to achieve these goals. In this century, educational challenges are increasingly complex due to technological developments, globalization, and rapidly changing social conditions. The world of education is currently required to continue to develop and must be able to adapt to various demands of the times in various fields, such as rapid technological developments, social changes, demands of the world of work, and global challenges.

Although knowledge management is considered to improve the quality of educational institutions, the results can vary depending on several factors, such as the state of the institution, the knowledge management practices implemented, and support from each individual or member level. The concept of knowledge management in educational institutions in Indonesia is still relatively young, and the management system is still being developed by research organizations in various parts of the world (Futaqi, 2020). The emergence of knowledge management theory is based on several theories about the importance of knowledge management for improving organizational quality, as put forward by experts such as Drucker (1970s), Karl-Eric Sveiby (1980s), and Nonaka & Takeuchi (1990s) at the beginning of the 20th century. (Poernomo & Wahono, 2018).

Drucker (1993) states that knowledge is now rapidly becoming the only factor in production, leaving aside capital and labor. This change means that it is necessary to change the mindset of seeing knowledge as an important resource. Land, labor, and capital are important too, but limited. Without them, knowledge cannot be

generated. Without them, knowledge cannot function. So effective management is needed, namely the application of knowledge in order to continue to obtain other resources.

Sveiby (2001) states that the concept of knowledge management depends on how people use it. For researchers and practitioners who tend to have education in the field of computer science or information technology, such as information management systems, AI, reengineering, groupware, etc. Knowledge is an object that can be identified and handled in an information system that will continue to develop increasingly rapidly, supported by new developments in the field of information technology, while researchers and practitioners who tend to have education in the fields of philosophy, psychology, sociology, or business/management are especially involved in assessing, changing, and improving individual human skills and/or behaviors. For them, knowledge is a process – a complex set of dynamic skills – the application of knowledge that is constantly changing.

Nonaka and Takeuchi (1995) define knowledge management as the ability of a company as a whole to create new knowledge, disseminate it through the organization, and realize it in products, services, and systems. This knowledge management is considered the key to the success of Japanese companies in continuously innovating. Companies such as Honda, Canon, and Matsushita are known for their ability to respond quickly to customers, create new markets, and develop new products quickly. They use a unique approach to managing knowledge creation.

Adapting to a world that is full of challenges and very dynamic in all things, including science and technology, where students, who are in fact the millennial generation, are very close to digital things, is not easy. Therefore, every organization is competing to improve the quality of its institutions by managing its resources as best as possible, maximizing the professionalism of its teachers, and exploiting its potential through information technology and global knowledge. Knowledge management is all efforts made to manage tacit and explicit knowledge to obtain maximum results or success (Fernandez & Sabherwal, 2014).

The importance of knowledge management is also that it can increase the productivity of knowledge work, which is important in managing the 21st century, and knowledgeable human resources (knowledge workers) through the most important asset of the knowledge management process in the form of intellectual capital (Pulic, 2008). Efforts to improve teacher professionalism still need to be made through the implementation of effective knowledge management, because the statistical data states that one of the aspects that influences the quality of Indonesian education is the Teacher Ratio Academic Levels (Worldtop20.org, 2023) (Yusro, 2023). Education is considered the most important pillar of sustainable development and aims to realize a vision of inclusive and equitable sustainable development. In this context, the role of teachers cannot be underestimated because they have a central role in shaping and guiding the life paths of future generations.

Improving the quality of teacher professionalism is very important to ensure that education is not just a process of imparting knowledge but also a process of forming character and sustainable values. SDGs are a series of global agreements approved by world leaders as an effort to solve world problems, such as aspects of poverty, inequality and the environment, to ensure a much better life for citizens by 2030. As reported on the Indonesian Ministry of National Development Planning (BAPPENAS) SDGs page, these SDGs have universal principles and are comprehensive to ensure that no one is left behind (Rosari, 2023). The aspect of education as a global development goal is in fourth place, namely ensuring the implementation of quality, inclusive, and fair education by increasing lifelong learning opportunities for all (UNESCO, 2024). However, the current problem is that the quality of education in several countries is still low. The fourth SDG goal is an important milestone that focuses not only on universal access to education but also on its quality. Improving teacher quality is an important strategy to achieve this goal.

One of the government's policies to improve the quality and professionalism of teachers is the issuance of a policy based on the Law of the Republic of Indonesia (UU RI) Number 14 Year 2005 concerning Teachers and Lecturers, which emphasizes the urgency of education and training for teaching staff so that they have the capability to provide education and increase teaching professionalism (Pemerintah Indonesia, 2005). This emphasis indicates the need for teaching staff to continue to develop themselves through professional education (Mustaqim, 2023). The birth of UU RI Number 14 Year 2005 is a concrete manifestation of recognition of all aspects of the teaching profession. According to that law, teachers are professional educators whose main task is to educate, teach, guide, guide, train and evaluate students in early childhood education through formal, primary, and secondary education. So, teachers are required to go through a certification process to obtain their teaching qualifications and enhance their capabilities and professionalism (Zulfiati, 2014).

The implementation of knowledge management in educational institutions seeks to answer the challenges of the times by providing a holistic approach to equipping teachers with the skills, knowledge, and awareness needed to face the dynamics of modern learning. Knowledge management is a practice that focuses on the collection, storage, use, and sharing of information within an organization. Effective information management can increase an organization's competitive advantage and develop human resource intelligence or expertise. According to Mulyanto (2008), one of the unique resources needed to win competition is knowledge. Information, or knowledge, is the result of an organization's systematic consideration and application of information and knowledge. Knowledge is a more important resource than land, labor, or even capital because it is from this knowledge that an educational institution or institution has its own uniqueness, which will become a competitive advantage, so that it not only improves the quality of education but also produces a generation of qualified educators who can adapt to global challenges and contribute to sustainable development (Khoiriyah & Yuliana, 2018).

As the fourth SDG aim is to create a world of quality education (UNESCO, 2024), one of which is by increasing the supply of quality, competent, and professional teachers, this research aims to further explore the implementation of knowledge management in improving the quality and professionalism of teachers as well as their contribution to efforts to achieve the Sustainable Development Goals, or SDGs. By combining policy analysis, literature review, and empirical data, this research provides detailed insights that will assist policymakers, educators, and academics in optimizing the role of knowledge management in supporting the Sustainable Development Goals, or SDGs.

Method

This research aims to bring together findings from various studies that have been conducted previously through a comprehensive analysis of relevant literature with the aim of identifying general patterns, trends, and key findings related to knowledge management, teacher professionalism in educational institutions, and their role in supporting the achievement of SDG4. This research uses a systematic literature study approach. This approach is designed to investigate, evaluate, and synthesize scientific literature relevant to the research topic in a thorough and structured manner. It is a sequential process in an activity in order to collect library data, understand, document, and process research materials in accordance with the main research variables or topics (Zed, 2008).
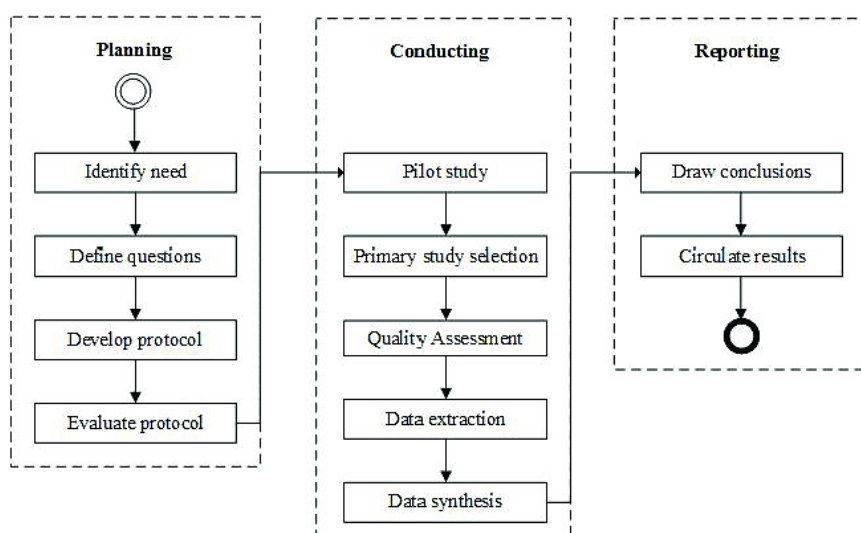

Figure 1. Systematic literature review method (Mumtaz et al., 2022)

The steps in the literature selection process are carried out in stages through three steps: planning, conducting and reporting. The planning stage begins with reading abstracts, keywords, and literature summaries, involving searching and selecting literature based on predetermined inclusion criteria. At the conducting stage, relevant data is taken from selected literature for further analysis. Analyzing the literature is done by summarizing the main findings, research methodology, and relevant findings from the literature that has been analyzed, then analyzing the differences and similarities between the literature to identify patterns and themes that emerge from the literature results. Next, at the reporting stage, research articles are prepared, and where the research will be published is chosen (Sobri et al.,2018;Mumtaz, et al., 2022).

The data collection process begins with a search from various sources of scientific literature, such as books, journals, articles, documents, etc., through academic database platforms such as PubMed, Google Scholar, Scopus, or other search engines with the keywords knowledge management, teacher professionalism, SDGs, and quality education as exclusion criteria. This search process is assisted by the Publish or Perish application and openknowledgemaps.org. for comprehensive literature coverage. The literature search method determines criteria that are appropriate to the research objectives, year of publication, and type of relevant research, resulting in 223 total articles within the past ten years (2014-2024) as inclusion criteria. Then, at the conducting stage, screening and selection by analyzing the literature are done by summarizing the main findings, research methodology, and relevant findings that found 57 articles that have been analyzed and chosen for the reporting stage.

At the data analysis stage, using context analysis from various sources that have been collected, a journal summary is created by listing the researcher's name, year, reading abstract, research objectives, research objects, research methods, and a summary of research results. Based on the summary of these results, it can be arranged in an organized and systematic manner to compile the results and link them to discussions according to the topic and research variables. Data analysis or interpretation is a procedure for systematically taking and compiling notes about research results through understanding and other methods to improve researchers' cognition, such as analyzing, converting, editing, outlining, reducing inappropriate ones, and presenting them to increase insight for researchers or other readers (Tohirin, 2013). Using the systematic literature study method, this research aims to present a systematic, in-depth, and holistic literature review regarding the relationship between knowledge management, the quality of teacher professionalism, and the achievement of the fourth SDG, namely the Sustainable Development Goals, in the educational context.

Results and Discussion

Based on the results of literature analysis and empirical studies related to the application of knowledge management to educational institutions, it was found that knowledge management plays a significant role in improving teacher professionalism and supporting the achievement of SDG4 (quality education).

Knowledge Management in Education

To improve the quality of education, knowledge management is very important through implementing a flexible organizational structure, using supporting technology, increasing individual and team capabilities, and implementing a strong learning culture. It is critical for principals to initiate change and assist individual learning in schools. By implementing better knowledge management, educational institutions have the potential to achieve much more significant development than currently (Mufti et al., 2019). Superior human resources are very important for the development of educational institutions. To improve the performance of educational institutions, it is necessary to involve analysis and remapping of human resource knowledge, training, and knowledge management culture to help change tacit knowledge into something that is easier to communicate, in the form of face-to-face forums and social media to share knowledge (Nugraha et al., 2022). Apart from face-to-face and social media, the drivers of the effectiveness of applying knowledge management to intellectual capital and innovation are organizational culture, leadership, and incentives (Cisneros et al., 2023).

The role of knowledge management in improving the quality of educational institutions involves several important things: technology, flexibility of organizational structure, increasing individual and team capability and productivity, as well as a culture of sharing knowledge and experience. Good knowledge management, use of technology, respect for knowledge, and collaboration between educators can work together to create innovation in learning, which can ultimately help school organizations achieve their educational goals in the era of industrial revolution 4.0 (Ridwan, 2019). Knowledge management helps educational institutions overcome pressure, avoid expensive duplication, reduce threats to the mobility of critical workers, stimulate increased creativity in creating new knowledge, and allow teachers to become more responsible and disciplined in carrying out tasks (Khaerudin, Warta, & Srisulitsyowati, 2020).

Knowledge management is an important strategy for facilitating the identification, creation, delivery, and reuse of knowledge within educational organizations. Schools as learning organizations are the result of the efforts of school principals and authorized individuals to create a sustainable learning culture within the organization (Mardia & Mukhtar, 2022). Knowledge management is an important factor in developing and maintaining data in schools because it is related to regular maintenance and backup of data, so as to prevent system disruptions

and ensure data reliability (Sugiyono & Noe'man, 2017). The application of knowledge management in any kind of organisastion, including Islamic educational institutions, allows the collection and formulation of existing knowledge to increase the competitiveness and quality of the institution. Even though its implementation requires a lot of time and effort, with quality leadership, knowledge management can help achieve goals and improve the overall performance of Islamic educational institutions (Nuryana, 2017).

Knowledge management provides significant benefits for improving the performance of educators in an educational institution, with factors such as socialization, externalization, combination, and internalization playing a role in measuring the performance of educators, so it is necessary to implement knowledge management in educational institutions optimally to remain competitive (Wahyudi & Sunarsi, 2021), this process is called the SECI Model (Socialization, Externalization, Combination, & Internalization), which includes a culture of discussion, seminars, training, publishing documents, research, and gathering information from evaluations of education and educational staff (Hidayatullah, 2020). So knowledge management is closely related to Human Resource Management (HRM), where the implementation of knowledge management really requires support from organizational leaders in building/changing organizational culture and the use of information technology in utilizing intellectual capital (curriculum), which requires knowledge management at the learning process level (Loisa, 2016).

The implications of implementing knowledge management in educational institutions have a positive impact on teacher performance, educational institutions, human relations between staff and students, and the overall quality of education. The quality of educational institutions is influenced by the effectiveness of knowledge management in terms of teacher professionalism, recruitment processes, and mastery of information and communication technology (Taqorub et al.,2018). The implementation of knowledge management strategies in higher education has a positive effect on the performance of educational institutions and human relationships (between staff and students) (Rasyid et al., 2021). This indicates that increasing enthusiasm for learning, intrapersonal skills, global insight, and media literacy skills, as well as improvements in communication, attention, familiarity, and openness, help strengthen relationships within the academic community. Thus, knowledge management strategies act as an important factor in improving relationships and the performance of educational institutions.

The implementation of knowledge management has its own challenges. The application of knowledge management and management quality standards applied to an organization are complementary in nature; however, there is still an embedded structural tension between the mechanistic approach of quality standard requirements for knowledge codification and the inherent difficulties in capturing tacit knowledge (Wilson & Campbell, 2020). There are several areas that often become problems: the capabilities of educators that do not match industry needs with the pedagogical capabilities of preparing learning tools; the lack of reliable human resources in managing educational institution facilities; and the effectiveness of communication between educational institutions and the general public (Meirani et al., 2022). The application of knowledge management has great potential for development; however, efforts to implement knowledge management are still not optimal due to a lack of understanding of the concept and a focus on managing the knowledge resources they have (Azwar, 2013). To maximize the implementation of knowledge management to increase school competitiveness, it is necessary to maximize the four main factors of the SECI Model, that is, socialization, externalization, combination, and internalization, so that the knowledge sources possessed in an educational institution are considered as important assets for achieving success in educational institutions, which will also have a positive impact on teacher performance (Sudargini, 2017).

Teacher Professionalism

According to the Indonesia Dictionary, professionalism is defined as quality, special intelligence, or someone's behavior that shows a profession (KBBI, 2014). Professionalism is a person's ability to position himself within the scope of work and outside the scope of work and his behavior in completing work responsibly, on time, with integrity, able to manage his emotions and thoughts, and able to differentiate personal interests from his profession (Purwanti, 2022). The term professionalism comes from accupation, namely carrying out a profession in accordance with the capabilities obtained from special training or education (Arifin, 2000).

In UU RI No. 14 Year 2005 concerning Teachers and Lecturers, it states that professional competence is the mastery of broad, intensive, and comprehensive learning material (Pemerintah Indonesia, 2005). Referring to Law No. 14 of 2005, educators are expected to be able to explain and further develop learning tasks tailored to student needs. Educational professionalism means that educators have an inherent responsibility to further

develop their expertise and commitment in the world of education and are able to do so scientifically in their field of expertise. Professionalism consists of four stages: pre-professional, autonomous professional, collegial professional, and post-professional (Wardoyo, 2022). These four phases can be explained by the fact that in the initial or pre-professional phase, educators are in preparation for managerial tasks and implementing superiors' directions. The next phase, which is professional autonomy, is characterized by the educator's right to choose teaching methods and great pedagogical freedom. Collegial professionals emphasize collaboration and the development of a professional culture through collaboration with colleagues. Meanwhile, the post-professional phase reflects changes and developments at the turn of the millennium, indicating the potential for the emergence of a more inclusive and flexible post-modern professionalism. As time goes by, the meaning of professionalism continues to evolve, highlighting the need for the active involvement of educators in shaping the direction of educational professionalism in the future (Wardoyo, 2022).

Teacher professionalism is not only limited to having high academic qualifications but also understanding the social and cultural context of students. Teacher professionalism involves the ability to adapt to student diversity, understand individual needs, and provide appropriate support. Apart from that, community involvement is also important in supporting teacher professionalism. Collaboration between schools, families, and communities can create an environment that supports the full development of each student's potential (Setiani, 2017). Providing professional services is an attitude toward life, which is called professional ethics. Teacher professional ethics includes moral and ethical standards of behavior that teachers must adhere to. This includes honesty, integrity, and a commitment to creating a safe and supportive learning environment (Lubis, 1994). It provides characteristics of teacher professionalism, namely, high abstraction and commitment (Glickman, 1981).

Ahmad and Siregar (2015) examined teacher professionalism according to the views of Imam Al Ghazali (a Muslim theologian and mystic, a Persian Sunni Muslim polymath) and Buya Hamka (an Indonesian scholar, philosopher, writer, lecturer, politician, and journalist) that professional teachers are role models for students and have principles and compassion. Buya Hamka added that teachers must be able to interact with the community so that professional teachers maintain the trust of parents, the community, and colleagues, build positive relationships with students, and show commitment to educational ethics by having in-depth knowledge of the subjects they teach. This includes conceptual understanding, recent developments in the field, and the ability to relate content to students' everyday lives. This understanding does not only include academic aspects, but also a deep understanding of the needs and potential of individual students.

Effective implementation of knowledge management is a driving factor for the success of Total Quality Management (TQM) in improving the quality of human resource performance in organizations through knowledge sharing activities (Saffar & Obeidat, 2020). This activity can provide significant development potential for educational institutions. The knowledge resources possessed by superior humans are very important for the development of educational institutions. Every institution has the potential to become more advanced, but knowledge management to improve the intellectual abilities of human resources is still not optimal (Mufti et al., 2019). Knowledge management plays an important role in improving the performance of educational institutions by involving the analysis and mapping of human resource knowledge, training, knowledge management culture, face-to-face forums, and other social media used to share knowledge, so that knowledge management helps change tacit knowledge and makes it easier to communicate (Nugraha et al., 2022).

Teacher professionalism is an important foundation for building a quality and sustainable education system. Professional teachers are not only teachers who convey knowledge to their students, but also mentors, inspirations, and leaders in the classroom. Teacher professionalism considers the importance of the roles, responsibilities, development, and influence of professional teachers in educational development. Teacher professionalism can be defined as a collection of attitudes, behaviors, and skills that produce teachers who are committed, competent, and responsible for the development of their students. Aspects of teacher professionalism include aspects of ethics, academic knowledge, teaching skills, communication skills, and involvement in personal development.

Professional teachers can adapt their teaching methods to students' learning styles, create an inclusive environment, adapt the curriculum to individual needs, and have effective communication skills. Teaching skills include the ability to design and deliver learning materials in a way that stimulates and motivates students. This includes the ability to convey information clearly, listen empathetically, and communicate positively with students, colleagues, and parents. Effective communication includes the ability to provide constructive feedback, work together as a team to achieve educational goals, and continue to grow through lifelong learning. Teachers are required to frequently attend training, seminars, and courses to keep their knowledge and skills up-

to-date. Willingness to learn and adapt to changes in education are the main characteristics of professional teachers.

Professional teachers are responsible for the development and well-being of their students. This includes understanding students' individual needs, creating a supportive learning environment, and supporting students who face challenges. Responsibility for society includes the role of teachers in developing responsible citizens, making positive contributions to society, and being role models for students. They incorporate educational technology into their lessons. The use of learning software, online learning platforms, and other digital tools is part of the modern approach to education. Mastering technology not only enhances students' learning experiences but also helps teachers prepare students for an increasingly connected world. Professional teachers are aware of their professional development. This includes the desire to achieve a higher level of expertise, such as becoming a school principal, supervisor, or expert in a particular field (Nisa et al., 2023).

Effective educational leaders are often led by professional teachers who can inspire and motivate their colleagues and contribute to positive change in the education system. Professional teachers have a big influence on educational development. This creates a positive learning environment, motivates students to reach their maximum potential, and contributes to improving the quality of national education. As positive role models, professional teachers also play an important role in developing students' character, building a moral foundation, and creating a better society. According to Imron (2016), in educational institutions, the qualities of a leader are still widely referred to because ideal leaders at the educational unit level still require various commendable qualities of leaders because they are tied to exemplary aspects such as intellectuality, verbal ability, responsibility, degree of participation, social status, economy, and so on. Even though teacher professionalism has a positive impact, there are many challenges to achieve an optimal level of professionalism. These challenges include limited resources, work pressure, and constant changes in educational requirements. Overcoming these challenges requires systematic support, ongoing training, and collaboration between educational institutions. The future of teacher professionalism lies in adapting to technological developments, inclusive education, and global demands.

The Fourth Sustainable Development Goal (Quality Education)

Sustainable Development Goals (SDGs) in Indonesian terms are the joint commitment of countries in the world to improve the welfare of people throughout the world. SDGs are a follow-up to the Millennium Development Goals (MDGs) program, which has been agreed upon since September 2015 in the form of 17 Sustainable Development Goals in the form of real action, as the responsibility of all parties, not only the government, but also requires the role of all non-government elements to synergize and collaborate in achieving these development targets for the welfare of society (BAPPENAS, 2023).

The programs agreed upon in the SDGs are a follow-up to the incomplete Millennium Development Goals (MDGs) program and are planned until 2030 in the form of 17 goal programs that are global in nature and can be applied universally, that is: 1) Avoiding Poverty; 2) No Hunger; 3) Health and Welfare; 4) Quality Education; 5) Gender Equality; 6) Clean Water and Adequate Sanitation; 7) Clean and Affordable Energy; 8) Improving the Economy; 9) Infrastructure, Industry, and Innovation Improvements; 10) Reducing Liveability Gaps; 11) Sustainable Cities and Settlements; 12) Sustainable Consumption and Production; 13) Handling Climate Change; 14) Ocean Ecosystem; 15) Land Ecosystem; 16) Peace, Justice, and Strong Institutions; 17) Global Partnership to Achieve Sustainable Goals. These goals take into account the reality, capacity, and level of development of various countries in relation to national policies (BAPPENAS, 2023).

Indonesia is also committed to supporting the SDGs because it is in line with national development planning with the tagline "Golden Indonesia 2045" as a policy innovation for a country with the fourth largest education and economic segment in the world (BAPPENAS, 2023). In the SDGs, there are 17 goals with 169 measurable development targets to be achieved by the specified time, which are inclusive, universal, and contain policies that can be considered national realities to ensure demands for world leadership in resolving problems of poverty, inequality, and the impact of climate change (Paputungan, 2023).

Education plays an important role in achieving the Sustainable Development Goals (SDGs), which cover various aspects of life, such as universal access to quality education, improving skills, strengthening society through science, and an effort to increase socio-economic equality in society. The educational aspect is discussed in the fourth point of the SDGs, so it is referred to as SDG 4, which reads, "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations, 2015). This

SDG 4 goal reflects the determination of world leadership to create an inclusive, fair, and quality education system and to provide lifelong learning opportunities for all people as part of efforts to achieve global sustainable development.

The Annual Report on the Achievement of SDGs by BAPPENAS (2023) states three main targets as an effort to achieve quality education (SDG 4), namely improving the quality of learning outcomes, equalizing access to education, and improving the quality of educational institutions (schools) and their teaching staff. In the presentation of the 2023 SDGs Achievement Report, to achieve the first target to improve the quality of learning outcomes in 2023, the quality of teaching and learning continues to be improved through the implementation of curriculum and learning models that encourage students to be able to think at a high level, a quality learning outcomes assessment system, increasing the competence of educators, utilizing information technology and computers in learning, and increasing the involvement of parents in education (BAPPENAS, 2023). In the second target regarding equal access to education, the government is trying to accelerate the implementation of the 12-year compulsory education program to prevent the potential for an increase in school dropout rates, carry out data collection strategies, outreach, and align various sectors, especially for dealing with out-of-school children, affirmative areas, students in vulnerable, and poor community groups.

The third main target of SDG 4 is to improve the quality of schools and the quality of teaching staff. In 2023, the government is committed to providing educational facilities and infrastructure based on the needs and affirmations of 3T regions (disadvantaged, frontier, and outermost), as well as recovery for schools affected by disasters. Meanwhile, in an effort to improve the quality of teaching staff, since 2022, the government has made a policy to reduce disparities in the distribution of teaching staff based on needs mapping, improve the qualifications, competence, and professionalism of teachers and lecturers, accelerate the revitalization of Educational Personnel Educational Institutions (LPTK), and increase the effectiveness of the Education Teacher Profession (PPG) (BAPPENAS, 2023). This is still far from the target, because data on teachers registered with Dapodik Kemendikbudristek and EMIS Kemenag (both are Indonesian information systems related to education data that managed by government ministries) in 2022 shows that teachers who have teaching certificates are still 31.67% of the 3.36 million teachers in Indonesia. Based on this data, various efforts are still needed to improve the quality of teaching staff who are certified competent and experts in their fields.

Implementation of Knowledge Management to Achieve the Fourth Sustainable Development Goals (SDG4) and Improve the Quality of Teacher Professionalism

Implementation of knowledge management, achievement of SDG4 (quality education), and teacher professionalism are interrelated matters. Amidst a dynamic external environment that continues to develop in various sectors, especially in the education sector, the role of knowledge management can play a role in increasing the competitiveness of educational institutions, including quality teaching staff, in achieving quality education goals (SDG4) (Wu et al., 2019). The implementation of knowledge management integrated with efforts to fulfill government policy guidelines to maximize the achievement of SDG4 requires effective knowledge management in the aspect of intellectual capital. Understanding and implementing regulatory and academic program improvement initiatives can add value to higher education in a country (Adhikari & Shrestha, 2023).

Knowledge management has a positive effect on developing intellectual capital and increasing innovation developed by teachers in educational institutions. The application of knowledge management contributes positively to teachers' professional skills by improving the processes of knowledge transformation, socialization, leadership, combining knowledge from outside, and capturing knowledge, so that educational institutions can continue to improve the quality of education they provide to students (Ferdinandus, Imron, & Supriyanto, 2015). There are enabler factors (which in this research are organizational culture, leadership, and incentives) as key aspects in the performance of knowledge management processes in educational institutions, with organizational culture having the greatest impact (Iqbal et al.,2019;Cisneros et al., 2023). A culture of knowledge sharing that is implemented, such as professional skills training courses and incorporating SDG4 achievement values, can increase teachers' professional competence (Expósito & Sánchez, 2020).

The application of knowledge management using the SECI (Socialization, Externalization, Combination, and Internalization) model was also applied in Zabolotniaia and Cheng's (2020) research to assess the efficiency of one modern educational platform, which shows that there is a synergistic interaction between technological and managerial resources of educational institutions in transferring knowledge and professional skills. Hidayatullah (2020) uses the SECI model, which includes a culture of discussion, seminars, training, publishing documents,

research, and collecting information from educational evaluations and educational staff in order to help schools enrich knowledge, share information, and optimize resources to improve the quality of education. Knowledge management is considered an important asset for school success. Knowledge management has a positive impact on teacher performance in schools, with four main factors (socialization, externalization, combination, and internalization) influencing performance by involving the maximization of knowledge management to increase school competitiveness and continued research on the effectiveness of knowledge management in schools (Sudargini, 2017).

The implementation of knowledge management plays a crucial role in shaping the quality of teacher professionalism, which in turn can make a significant contribution to achieving the Sustainable Development Goals (SDGs). SDG 4, which in this case focuses on improving the quality of education, sets the goal of ensuring universal access to quality education. Knowledge management can detail concrete steps to improve academic qualifications and teacher competencies, including through rigorous selection, intensive training, and the development of relevant curricula. Teachers who are highly qualified and have strong pedagogical skills can have a positive impact on the quality of education and create a stimulating learning environment.

Based on the analysis and discussion related to the results of previous research, it shows that the implementation of knowledge management has a positive and significant impact on increasing teacher professionalism in achieving the SDG4 goal (quality education). This can be concluded from the application of knowledge management in converting knowledge through the SECI Model, the management of quality intellectual capital and human resources, mastery of information technology, increasing individual abilities, as well as a culture of knowledge sharing and collaboration between educators that can increase teacher competence and professionalism in achieving goals. SDG4, namely quality education.

Factors that maximize the implementation of knowledge management to increase teacher professionalism in achieving SDG4 are instilling SDG4 values in the educational curriculum, being integrated into educational government regulations, and the importance of the role of leadership in a strong educational institution and the role of support from the leadership of educational institutions, so that they can encourage a learning culture and facilitate collaboration between teachers, which will provide better results in implementing knowledge management. Apart from that, the active involvement of all members, both teachers and staff of educational institutions, stakeholders, and the educational community as a whole, has an important role in supporting the successful implementation of knowledge management. Apart from human resource factors, there are other factors, namely the role of information and communication technology, a healthy organizational culture that supports innovation and continuous learning, as well as the ability of educational institutions to overcome obstacles such as a lack of resources and the ability to adapt to change.

Therefore, it is important for educational institutions to maximize the application of knowledge management to increase teacher professionalism and achieve SDG4 goals, so that each educational institution has competitive value, improves the quality of education, and improves the overall performance of the institution. Further research is also needed to understand the effectiveness of knowledge management in various educational contexts and its implications for the future success of educational institutions.

Conclusion

Based on the results of research analysis and discussion, it can be concluded that the overall implementation of knowledge management has a significant impact on increasing teacher professionalism and achieving SDG4 goals. The effectiveness of the implementation of knowledge management can be assessed by the increasingly strong collaboration between educators, the use of technology that supports learning and teaching, and improving the quality of educational institutions.

These results confirm that knowledge management is an important factor in improving the quality of educational institutions. However, the successful implementation of knowledge management also depends on contextual factors, including leadership support, organizational culture, and available resources. Likewise, in preparing teachers as agents of change to achieve SDG4, by improving qualifications, competencies, and understanding of sustainability principles, teachers can more effectively guide students towards sustainable thinking.

In supporting SDG 4, knowledge management also needs to focus on creating a culture of knowledge sharing within an educational institution, such as through group discussion forums, sharing experiences, teacher training

to create an inclusive learning environment, etc. Well-trained teachers can provide appropriate support for students with special needs, resulting in an equitable and meaningful education for all.

Recommendations

Based on the results and discussions that have been presented, there are several practical recommendations that can be given to educational institutions in implementing knowledge management to increase teacher professionalism and achieve SDG4 goals. One is understanding the importance of the role of leadership, where leaders of educational institutions must be able to encourage a culture of learning, create an atmosphere of supportive work, and be a role model in implementing knowledge management. Apart from the role of leader, there is a need for training and skill development related to the application of knowledge management and the use of information technology to manage various knowledge resources. There is also a need for a platform and system that facilitate collaboration between educators, students, and other stakeholders so that the integration of knowledge management principles into the policies and organizational practices of educational institutions can achieve the SDG4 target, namely the creation of an inclusive, fair, and quality education system and to provide lifelong learning opportunities for everyone.

Scientific Ethics Declaration

* The authors declare that the scientific, ethical, and legal responsibility of this article published in the EPESS journal belongs to the authors.

* All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee. The authors are committed to upholding the standards of ethics in scientific research and reporting, ensuring the validity, reliability, and ethicality of the findings presented in this article.

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References

Adhikari, D. R., & Shrestha, P. (2023). Knowledge management initiatives for achieving sustainable development goal 4.7: Higher education institutions' stakeholder perspectives. *Journal of Knowledge Management*, *27*(4), 1109-1139.

Ahmad, M. Y., & Siregar, B. (2015). Guru profesional menurut imam. *Journal UIR - Universitas Islam Riau*, *12*(1), 21-45.

Arifin, H. (2000). *Kapita selekta Pendidikan (Islam dan Umum)*. Jakarta: Bumi Aksara.

Azwar, M. (2013). Penerapan knowledge management (Studi Kasus SDIT Al-Hamidiyah Depok). *Jurnal Majalah Perpustakaan dan Informasi*, *6* (1), 1-6.

BAPPENAS. (2023). *Laporan pelaksanaan pencapaian tujuan pembangunan berkelanjutan/ sustainable development goals (TPB/SDGs) tahun 2023*. Kementerian Perencanaan Pembangunan Nasional / BAPPENAS. Retrieved from https://sdgs.bappenas.go.id/website/wp-content/uploads/2023/11/Laporan-tahunan-SDGs-2023.pdf

Cisneros, M. A., Reyna, J. B., & Perlines, F. H. (2023). Interaction between knowledge management, intellectual capital, and innovation in higher education institutions . *Springer Education and Information Technologies* , 9685-9708.

Drucker, P. F. (1993). *The rise of the knowledge society.* Retrieved from https://cooperative-individualism.org/drucker-peter_the-rise-of-the-knowledge-society-1993-spring.pdf

Effendy, O. U. (2009). *Human relations and public relations.* Bandung: CV. Mandar Maju.

Expósito, L. M., & Sánchez, J. G. (2020). Implementation of SDGs in university teaching: A course for professional development of teachers in education for sustainability for a transformative action. *Sustainability*, *12*(19), 8267.

Ferdinandus, E., Imron, A., & Supriyanto, A. (2015). Model knowledge management dalam organisasi Pendidikan. *Jurnal Pendidikan Humaniora*, *3*(2), 106-115.

Fernandez, I. B., & Sabherwal, R. (2014). *Knowledge management systems and process.* United Kingdom: Taylor & Francis.

Futaqi, S. (2020). Manajemen pengetahuan dalam meningkatkan mutu lembaga Pendidikan Islam. *TA'LIM: Jurnal Studi Pendidikan Islam*, *3*(2), 210-229.

Glickman, C. D. (1981). *Developmental supervision: Alternative practices for helping teachers improve instruction* . Alexandria, Virginia: ASCD.

Hidayatullah, L. I. (2020). *Penerapan knowledge management di SD Muhammadiyah 1 alternatif (SD Mutual) kota magelang.* (Master's thesis). Program Studi Pendidikan Agama Islam, Sekolah Pascasarjana, Universitas Muhammadiyah Surakarta.

Imron, A. (2016). *Proses manajemen tingkat satuan Pendidikan.* Jakarta: Bumi Aksara.

Iqbal, A., Latif, F., Marimon, F., Sahibzada, U. F., & Hussain, S. (2019). From knowledge management to organizational performance modelling the mediating role of innovation and intellectual capital in higher education. *Journal of Enterprise Information Management* , *32* (1), 36-59.

KBBI. (2014). *Kamus besar bahasa Indonesia.* Jakarta: Pusat Bahasa, Departemen Pendidikan Nasional Indonesia. Retrieved from https://perpus.unimus.ac.id/wp-content/uploads/2012/05/Kamus-Besar-Bahasa-Indonesia.pdf

Kemenko PMK. (2020, November 14). Pendidikan. menko PMK: Kualitas Lembaga Pendidikan harus terus dijaga dan ditingkatkan. Retrieved from https://www.kemenkopmk.go.id/menko-pmk-kualitas-lembaga-pendidikan-harus-terus-dijaga-dan-ditingkatkan.

Khaerudin, M., Warta, J., & Srisulitsyowati, D. (2020). Manajemen pengetahuan salah sebagai satu jalan dalam pengembangan lembaga Pendidikan unggul pada tk bina mulia cibitung. *Jurnal IFORTY*, *1*(2), 159-172.

Khoiriyah, J., & Yuliana, I. (2018). Modal intelektual, keunggulan kompetitif, dan kinerja keuangan pada perusahaan high ic di Indonesia dan Singapura. *JMM UNRAM*, *7*(4), 17-32.

Loisa, J. (2016). Penyusunan Kurikulum sebagai Salah Satu Implementasi Manajemen Pengetahuan di Lembaga Pendidikan Tinggi. *KalbiScientia, Jurnal Sains dan Teknologi*, *3*(2), 72-80.

Lubis, S. (1994). *Etika profesi.* Jakarta: Sinar Grafika.

Mardia, & Mukhtar, M. (2022). Knowledge Management sebagai Upaya Pengembangan Learning Organization di Lembaga Pendidikan Islam. *Educational Leadership, Jurnal Manajemen Pendidikan*, *2*(1), 139-153.

Meirani, R. K., Sobri, A. Y., & Sunarni. (2022). Analisis permasalahan pelaksanaan sistem penjaminan mutu internal (studi kasus di smk cor jesu malang). *Kelola: Jurnal Manajemen Pendidikan*, *9*(2), 203-211.

Meirani, R. K., Supriyanto, A., & Imron, A. (2023). Implementasi total quality management melalui penjaminan mutu dan pelibatan stakeholder dalam penyusunan kurikulum SMK PK. *Kelola: Jurnal Manajemen Pendidikan*, *10*(2),115-131.

Mufti, U., Fauzi, H. N., & Perawironegoro, D. (2019). Implementasi manajemen pengetahuan islam di sekolah Muhammadiyah. *Jurnal Tarbiyatuna*, *10*(2), 181-187.

Mulyanto, A. (2008). Implementasi knowledge management untuk meningkatkan kinerja perguruan tinggi. *Seminar Nasional Aplikasi Sains dan Teknologi* (pp. 42-56). Yogayakarta: IST APKRIND.

Mumtaz, M., Ahmad, N., Ashraf, M. U., Alghamdi, A. M., Bahaddad, A. A., & Almahrabi, K. A. (2022). Iteration causes, impact, and timing in softwaredevelopment lifecycle: An SLR. *IEEE Access*, *10*(5), 65366-65375.

Mustaqim, D. A. (2023). Peran Pendidikan Profesi Guru untuk Meningkatkan Profesionalitas dan Kualitas Pembelajaran di Indonesia. *Literaksi: Jurnal Manajemen Pendidikan, Vol. 01 No. 02*, 168-176.

Nisa, K., Sobri, A. Y., & Imron, A. (2023). Validasi instrumen supervisi akademik digital dalam peningkatan profesionalisme guru menggunakan teknologi digital. *Jurnal Akuntabilitas Manajemen Pendidikan*, *11* (2), 43-51.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: how japanese companies create the dynamics of innovation.* New York,NY: Oxford University Press.

Nugraha, I. N., Agustini, K., Warpala, I. W., & Sudatha, I. G. (2022). Implementasi manajemen pengetahuan sebagai upaya pengembangan lembaga pendidikan unggul pada TK widya nugraha batubulan. *Jurnal Widyadari*, *23*(2), 229-239.

Nuryana, Z. (2017). Knowledge management sebagai upaya pengembangan learning organization. *LITERASI*, *8*(1), 12-20.

Paputungan, F. (2023). Get to know the sustainable development goals (SDGs). *Journal of Hulonthalo Service Society (JHSS), 2*(2) .

Pemerintah Indonesia. (2005, December 30). *Undang-undang (UU) nomor 14 Tahun 2005 tentang guru dan dosen.* Retrieved from https://jdih.usu.ac.id/phocadownload

Poernomo, D., & Wahono, P. (2018). *Manajemen pengetahuan.* Jember: UPT Percetakan & Penerbitan Universitas Jember.

Praptowo, B. D., Michdor, M., & Suharsono, A. (2020). Keterlibatan siklus terintegrasi knowledge management terhadap perilaku kerja inovatif sumber daya manusia di balai diklat keuangan yogyakarta. *Jurnal Borneo Administrator, 16*(1), 1-22.

Pulic, A. (2008). *The principles of intellectual capital efficiency - a brief description.* Retrieved from https://kmeducationhub.de/tag/intellectual-capital-center/

Purwanti, H. (2022, December 13). *Profesionalisme kerja dalam kemajuan bangsa.* Retrieved from https://www.djkn.kemenkeu.go.id

Rasyid, M. K., Rahayu, A., & Wibowo, L. A. (2021). Penerapan strategi manajemen Pengetahuan untuk meningkatkan kinerja institusi Pendidikan dalam menghadapi revolusi industri 4.0. *JBM, Jurnal Bisnis dan Manajemen*, *8*, No. 1, 75-81.

Ridwan, S. (2019). Intellectual capital dan knowledge management dalam inovasi dan kreasi media pembelajaran berbasis kemampuan 4C dan literasi. *Proceeding of ICECRS* (pp. 75-81).

Rosari, N. A. (2023, November 2). *Apa Itu SDGs? Ini Pengertian dan 17 Tujuan Globalnya. Detikpedia.* https://www.detik.com/edu/detikpedia/d-7014430/apa-itu-sdgs-ini-pengertian-dan-17-tujuan-globalnya.

Sabherwal, R., & Becerra-Fernandez, I. (2003). An empirical study of the effect of knowledge management processes at individual, group, and organizational levels. *Decision Sciences*, *34*(2), 225-260.

Saffar, N. A., & Obeidat, A. M. (2020). The effect of total quality management practices on employee performance: The moderating role of knowledge Sharing . *Management Science Letters* , *10,* 77–90.

Sedarmayanti, Listiani, T., & Mulyaningsih. (2020). *Inovasi dan manajemen pengetahuan untuk mewujudkan sumber daya manusia unggul.* Bandung: Refika Aditama.

Setiani, A. (2017). *Laporan akhir tahun penelitian produk terapan: model entrepreneurship bagi calon guru berbasis praktik pembelajaran dalam meningkatkan kompetensi profesional.* Bandung: Universtas Pasundan.

Sobri, M., Ijab, M. T., & Nayan, N. M. (2018). systematic literature review untuk membuat model aplikasi pemantauan kesehatan cardiovascular. *Jurnal RESTI (Rekayasa Sistem dan Teknologi Informasi),2*(2), 458-464.

Sudargini, Y. (2017). Peran manajemen pengetahuan untuk meningkatkan kinerja pada masa pandemi covid 19 : studi kualitatif pada guru SMA di kabupaten pati. *Journal of Industrial Engineering & Management Research*, *2*(5).

Sugiyono, & Noe'man, A. (2017). Manajemen Pengetahuan Sistem Penilaian Raport pada Sekolah SMP Islam Terpadu Ar-Ridho Jakarta. *Jurnal CKI on SPOT*, *10*(1), 35-44.

Sveiby, K. E. (2001). *What is knowledge management?* Retrieved from https://www.sveiby.com/files/pdf/whatisknowledgemanagement.pdf

Taqorub, I., Pawenang, S., & Hadi, S. (2018). Pengaruh manajemen pengetahuan terhadap kualitas Pendidikan di SMK Kasatrian Solo Sukoharjo. *Edunomika*, 2(2), 187-195.

The American Productivity & Quality Center (APQC). (2023). *Knowledge management.* Retrieved from https://www.apqc.org/knowledge-management

Tohirin. (2013). *Metode penelitian kualitatif dalam Pendidikan dan Bimbingan Konseling.* Jakarta: Rajawali.

Tuala, R. P. (2018). *Manajemen peningkatan mutu sekolah.* Bandar Lampung: Lintang Rasi Aksara Books.

UNESCO. (2024). *Sustainable development goal 4 (SDG4) is the education goal.* Retrieved from https://www.unesco.org/sdg4education2030/en/sdg4

United Nations. (2015). *Department of economic and social affairs.* Retrieved from https://sdgs.un.org/goals/goal4

Wahyudi, & Sunarsi, D. (2021). Manfaat penerapan manajemen pengetahuan bagi kinerja dosen di masa pandemi covid-19. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, *7*(2), 285-291.

Wardoyo, C. (2022, May 11). *Profesionalisme dan profesionalisasi pendidik di perguruan tinggi.* Retrieved from https://um.ac.id/rilis/profesionalisme-dan-profesionalisasi-pendidik-di-perguruan-tinggi/

Wilson, J. P., & Campbell, L. (2020). ISO 9001:2015: The evolution and convergence of quality management and knowledge management for competitive advantage. *Total Quality Management & Business Excellence*, *31*(7–8), 761–776.

World Population Review. (2023). *Education rankings by country 2023.* Retrieved from https://worldpopulationreview.com/country-rankings/education-rankings-by-country.

Worldtop20.org. (2023). *International education database*. Retrieved from https://worldtop20.org/education-database/.

Wu, J., Lo, M. F., & Ng, A. W. (2019). *Knowledge management and sustainable development*. Encyclopedia of sustainability in higher education (pp.1049-1057). Cham :Springer.

Yusro, M. (2023, August 20). *Peringkat sistem Pendidikan dunia 2023, Indonesia ke 67 dari 203 negara*. Retrieved from https://www.myusro.id/?

Zabolotniaia, M., & Cheng, Z. (2020). Use of the LMS moodle for an effective implementation of an innovative policy in higher educational institutions. *International Journal of Emerging Technologies in Learning* , *15*(13), 172-189.

Zed, M. (2008). *Metode penelitian kepustakaan.* Jakarta: Yayasan Obor Indonesia.

Zulfah, M. (2023, January 2). Pendidikan Indonesia di mata dunia. Retrieved from https://www.kompasiana.com/marinizulfah7017/63b28c8b4addee45e8604354/pendidikan-indonesia-di-mata-dunia.

Zulfiati, H. M. (2014). Peran dan fungsi guru sekolah dasar dalam memajukan dunia Pendidikan. *Trihayu: Jurnal Pendidikan Ke-SD-an, 1*(1), 1-4.

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