

The Analysis of Competencies Among Teachers

Letchumie Devi Varatha Raju

**Department of Education Foundations and Humanities, University of Malaya,
Malaysia, 22091185@siswa.um.edu.my**

Azni Yati Binti Kamaruddin

**Senior Lecturer, Department of Education Foundations and Humanities, University of
Malaya, Malaysia, azniyati@um.edu.my**

Abstract

Education is delivered in all fields with the aim of producing competitive people following the drastic changes happening around us. Although parents are responsible for the moral development of children, schools still play an important role in moral development and channelling moral values to students. In this context, the development of professionalism and the improvement of teacher competence are the most important aspects in the effort to achieve educational excellence in schools. The study reviews by a systematic analysis method use databases from Google Scholar and the Google search engine. The search finding is to identify competencies among teachers. As a result, four competencies are found that are important in conducting the teaching process. Each section is discussed in detail to get an overview of the competencies. In addition, this paper also highlights the challenges faced by teachers' and provides suggestions to improve the teaching process. Further research on this topic is expected to enlighten people involved, such as the ministry, schools, and the community, about the importance of competencies in teachers.

Keywords: Teacher Competencies, Moral Education, Teacher Professionalism, Teaching and Learning Process, and Educational Excellence

Introduction

Educators have been encouraged to adapt appropriate teaching methods according to changing times. In the era of the beginning of the education system, traditional methods are used, which is a one-way and teacher-centered teaching process. The traditional teaching method is a teacher-centered teaching technique that conveys textbook knowledge (Leite, F.

N., Hoji, E. S., & Júnior, H. A. 2018; Yuemeng Wng, 2022) and provides information to meet the requirements of the syllabus (Degago, A. T., & Kaino, L. M. ,2015) to students. Teaching techniques or strategies used under this method are demonstration, storytelling, the question method, and team teaching. Next, the approach is improved to student-centered teaching. Student-centered teaching is based on the concept of constructivism, which means that students associate the information they learn with new information they already know (Emaliana, I., 2017). In addition, technology-based, digital teaching is also introduced in pedagogy.

Nevertheless, the issue of pedagogy among educators is still expressed by various parties. The issue of teachers being incompetent and failing to carry out their responsibilities causes the teaching and learning objectives in schools to not be fully achieved (Tolochko, S., 2019; Ilminza Zakaria et.al., 2021). According to Christiansen et al., (2021), the quality and professionalism of teachers in a school can be a reference for the success of educational programs carried out through interventions in schools. Therefore, the development of teacher competence can not only solve the complexity of 21st-century education but also respond to the demands of education in the era of industrial revolution 4.0, especially in a crisis situation such as the Covid-19 pandemic (Siregar et al., 2020; Sudrajat, 2020; Santoso, 2019). Teachers need to use their competence by combining important aspects in the teaching process in order to achieve the set teaching objectives. Following these requirements, teachers should deliver moral education with effective teaching methods in order to produce students with noble character.

Competency in Education

Teaching is a set of teaching skills that contain a set of teaching behaviors that can lead to the achievement of specific teaching objectives (Gage, 1963). In addition, teaching competence is the effective practice of teachers that can be observed and able to achieve the results required by students, where the teaching competence involves the use of various teaching skills (Parveen & Srivastava, 2020). Parveen & Srivastava (2020) also highlighted the opinion that teaching competence covers various dimensions such as mastering subject content, increasing student motivation, planning, presenting, and evaluating skills, as well as classroom management skills.

In addition, the word pedagogy comes from Ancient Greece, which means that the study of children's education (Nuraida & Oktaviana, 2020). According to researchers Nuraida & Oktaviana (2020), pedagogical competence is a set of activities that master learning theory, develop curriculum, organize learning using technology, conduct an assessment, generate

assessment results, and utilize the assessment results in order to improve the quality of learning. The teacher's ability to master pedagogical competence and the implementation of pedagogical competence in English have been studied in this study. Although the results of the study show well in all categories, the context of the use of various teaching techniques is still at a weak level; that is, the score is 25%.

Singh et al. (2022) defined teacher competence in nine different dimensions: field competence, sociocultural competence, emotional competence, communication competence, information and communication technology competence, and environmental competence. According to researcher Vijay Kumar (2013), competence is the use of professional knowledge and skills in the workplace and is supported by the teacher's professional values. The competence shows the ability of a teacher to help, guide, and advise their students so that the students can achieve the desired success. Researchers Sulaiman and Ismail (2020), on the other hand, define competence as the individual's ability to apply or use knowledge, skills, abilities, behavior, and personal characteristics to perform a difficult task by holding a certain role and position.

Following the main transformation in social, economic, political, and cultural contexts driven by scientific development, the competence of a teacher becomes solutions for all complex problems that occur in the transformation (Fitriyah, 2019). The development of teacher competence not only solves problems in 21st-century learning but is also able to answer the demands of education in the era of industrial revolution 4.0, such as in the context of the Covid-19 pandemic crisis (Selvi, 2017; Sulaiman & Ismail, 2020; Siregar et.al. , 2020). So researchers Kraft and Christian (2022) emphasize that the development and assessment of teacher competence is very important and needs to be done consistently from time to time so that the teaching field can face the challenges of changing times.

Shulman (1992) explains content knowledge as the teacher's knowledge of concepts and methods for a specific discipline or field in the subject being taught. While pedagogical knowledge is a 'mix' between content and pedagogical knowledge to form an understanding of how a specific topic, problem, or issue is organized, represented, and adapted to various interests and abilities among students and presented in the form of teaching. Overall, previous researchers stated that teaching competence covers strategy, understanding of student psychology, and the learning process. Furthermore, in an effort to improve 21st-century skills among students, teachers should contain certain competencies such as self-efficacy, communication, creating a conducive learning environment, curriculum management, continuous learning, and effective learning experiences (Selvi, 2017).

Competencies among teacher

Nguyen NTL (2023) conducted a study on teacher competence because contextual competence among teachers, especially in Asia, is reduced, and it becomes a challenge in preparation for the teaching profession. This study focuses on four teacher competencies, namely knowledge and skills, ethical manner, self-motivation, and self-reflection, as well as looking at the competencies acquired through work experience and how teachers in Vietnam create these competencies within themselves. Omar et.al., (2020) studied three types of competence among TVET teachers in Malaysia, namely knowledge, skill, and behavior competence. They looked at the relationship of the three competencies with practical teaching practices and identified the types of competencies that contribute greatly to the measurement of a teacher's competency. According to Omar et.al., (2020), knowledge competence plays a major role in determining teacher competence.

In addition, Fakhrudin et.al. (2023) stated that teacher competence is a set of knowledge, skills, and behaviors that must be possessed and dominated by teachers in the implementation of their professional duties as educators. According to them, the teacher's role as an imparter of knowledge, role model, and mentor is the main pillar in the achievement of learning outcomes. Researchers Mat said et al. (2023) criticized the competency programs that have been implemented to improve the competency of teachers in Malaysia. According to Mat said et.al (2023), competence among teachers is important to improve achievement in school, and the lack of competence can have a negative effect on the learning process of students.

According to Ghiațău's (2015) study on ethical competence, teachers who lack ethical competence are likely to make mistakes in their relationships with students. The development of weak ethical competence can lead to a great impact on students, in terms of learning in the long term; students will be less motivated and will be in fear while at school. Next, in Jantan and Piaw's (2017) research on teacher competence in the formation of student personality, teacher commitment is a major contribution to the determination of teacher competence in shaping student personality. Four components of competence were studied in this study, namely a) teacher commitment in the teaching process; b) character-building skills; c) teachers as facilitators in the teaching process; and d) the teacher's role in creating student motivation in the teaching process.

According to Sulaiman and Ismail (2020), there is a positive relationship between professional competencies such as personal, pedagogical, professional, and information technology characteristics and 21st-century skills among teachers in Malaysia. They emphasized that the competence among teachers needs to be improved according to the current

needs in the field of education. Furthermore, the competence of novice teachers in moral education teaching was studied by researcher Thambu (2024). This study shows that novice teachers still lack competence in the implementation of moral education teaching and are still faced with various problems involving their own attitudes, knowledge of content and pedagogy, teaching strategies, problems involving students, and a less conducive school environment.

Competencies of teacher in teaching process

Pedagogical Competency

In this context, some researchers dissect aspects of pedagogical competence in more detail. According to Kurnia-Irmawati et.al. (2017), pedagogical competence refers to the teacher's ability to manage teaching, including the ability to develop the learning system, interact or manage the learning process, and evaluate students. Four elements have been emphasized by Merkt (2017) in pedagogical competence, namely self-development, institution-based development programs, rules and laws in the teaching profession, and national competency standards. In addition, classroom control, improving efficiency, maintaining discipline and enthusiasm, encouraging teamwork, planning, communicating, focusing on results, analyzing developments, and frequently making changes are among the pedagogical skills that a teacher must have (Daminovet et.al., 2020). Even if the teacher does not master all the skills mentioned above, the mastery of those skills at a minimum level can also make a teacher's career path successful (Abidin, 2021).

Chana and Sahito (2022) stated that pedagogical competence is the teacher's ability to manage teaching and learning by involving topic knowledge, teaching methods, technology integration, planning, management, and evaluation, as well as student growth processes. This study looks at pedagogical competence among English teachers in the influence of students' academic progress. According to Nellitawati (2020), teacher pedagogical competence is seen as the main factor in increasing teacher morale. The pedagogical competence of teachers can not only produce students who are successful in academics but also produce teachers who are eager to serve as teachers.

Fajaria et.al (2023) conducted a study on pedagogical competence among lecturers. According to them, with pedagogical competence among educators, the profession will look different from other professions. The level of success of the teacher towards the student's learning outcomes is influenced by this competency. According to Pahrudin (2016), the ability to manage or master learning, understanding about students, learning management, the use of technology, the use of learning models, curriculum development in the learning process,

learning assessment, and the development of student potential in the learning process are components involved in pedagogical competence. He emphasized that this competence can be reflected in the indicator of teaching methods used by teachers to connect with students, where it can increase students' enthusiasm for learning and achieve learning outcomes.

A similar element was presented by researcher Irsyad et.al., (2019) about pedagogical competence in moral education, which is understanding the characteristics of students, mastering the theory and principles of learning, and the ability to develop the curriculum. According to Irsyad et.al., (2019), teachers who have pedagogical competence can create an interesting and fun learning atmosphere where it can lead to the achievement of learning outcomes. In addition to achieving learning outcomes, pedagogical competence can also create intellectual, emotional, and spiritual knowledge among students. This is because they emphasize that the teacher's teaching competence is not focused on the transfer of knowledge (cognitive) but also on developing the morals, personality, and character of students.

Content Knowledge Competency

According to researchers Nahar and Safar (2017), content knowledge competency in the subjects to be taught is important for a teacher in order to transfer knowledge to students. They highlighted the opinion that the success of a teacher in producing quality teaching can be measured through content competence because the level of content mastery can differentiate the teaching effectiveness of a teacher with another teacher even though the same teaching strategies and techniques are used. Only by mastering the content of the subject to be taught is a teacher able to answer the questions related to the subject asked by the students spontaneously as well as deal with problems related to the learning topic during the teaching process.

Meanwhile, Ambotang and Anuar's (2023) study related to the Teacher Teaching Quality Model to see the influence of content knowledge, pedagogical knowledge, and teacher commitment on the teaching quality of primary school teachers in Sabah, Malaysia, has identified that content knowledge and pedagogical knowledge complement each other in the production of quality teaching. According to them, teachers who have high content knowledge are able to overcome common classroom problems by detecting students' existing knowledge and using effective discussion methods to improve student understanding.

Next, in Anuas and Affandi's (2018) research on content knowledge and pedagogical knowledge among special rehabilitation teachers, they used the Shullman Model (1987) to see the effect on teaching. In their discussion they highlighted that special rehabilitation teachers can provide a deeper focus on content knowledge, such as developing the content of learning

materials, exploring information, and being able to make connections between students' existing knowledge and learning in the classroom, because actions like these can improve the quality of teachers.

Assessment Competency

Assessment is the primary responsibility of a teacher, and the absence of assessment competence can cause failure in the achievement of student learning outcomes (Rural, 2021). The evaluation can provide various information related to the progress and learning of students, the quality of teaching, and the accountability of a program and institution. Following that, Rural (2021) emphasizes the known fact that assessment competence among teachers has a major role in reforming the school system as well as adapting new ideas in their teaching.

According to researchers Zamri and Hamzah (2019), assessment competence among teachers is important since the assessment process in Malaysia has changed to assessment in the classroom where the general development of students is prioritized over academic achievement. As the implementer of the assessment, the teacher needs to have a set standard of competence, which is to master the elements of knowledge, skills, and positive attitude to produce effective classroom assessment and meet the current educational needs.

Personality Competency

In Pahrudin's study (2016), it was stated that personality competence plays a role in the success of a student. According to him, personality competence is a competence that exists naturally in the teacher, which is channeled to students through the teaching process in order to create a conducive learning atmosphere. The study carried out by Maulana et.al (2021) highlights the role of teachers as 'imitated,' which means the teacher becomes a good figure to students. They also emphasized that some characteristics in personal competence are steady, stable, mature, intelligent, dignified, and authoritative personality that can be an inspiration to students.

In addition, according to the perception presented by researcher Lukman et.al., (2021), personality competence is the most important competence in the teaching of moral education because of the characteristics of the moral education teacher who will be used as an example in the teaching session of the subject. Accordingly, Lukman et.al., (2021) highlighted that this personality competency is the basis for the creation of other competencies within the teacher.

Next, the study of the teacher's personality and the formation of inner character among students was done by Ahmad et al. (2017). The results of the study summarize that the teacher's

personality can help students understand the knowledge conveyed by teachers who love them as their own children and give guidance and advise them wisely and patiently. Ahmad et al. (2017) argue that the elements identified in this study not only increase students' personalities and even improve their understanding of learning as well as increase their motivation to focus in studies.

Teacher Challenges in Teaching

In an effort to improve the quality of schooling and learning at the global level, attention has shifted to teachers and teaching practices (Bengtsson et al., 2020; UNESCO, 2016). Today's teachers need to be innovative in teaching and learning practices continuously so that positive changes occur in their students in order to achieve national education goals. This is because traditional teaching methods that are passive and lack student involvement will make it difficult for students to understand the lesson content (Leite, F. N., Hoji, E. S., & Júnior, H. A. 2018; Bhatti et al. 2019; Yuemeng Wng, 2022). This opinion is supported by Law and Zamri (2021), who state that traditional methods attract less attention from students and result in them not focusing on learning.

Furthermore, Vijaya Kumar (2013) highlights the issue that in addition to bearing a lot of workloads at school, a teacher is also faced with various daily tasks at home or elsewhere. Due to the burden of this task, teachers are unable to improve their competence and fail to deliver lessons to students effectively. He suggested that the government should give opportunities to teachers to be equipped with various competencies according to the needs of the latest education world.

In addition, Birhan et. al., (2021) also highlighted that the exclusion of moral content or the use of inappropriate pedagogy has caused failure in the delivery of the oral Education curriculum. According to his research, many relevant contents in the formation of students' character are included in textbooks, but appropriate pedagogical methods are not used to instill those contents in the students' minds. In addition to the teaching process, the lack of attention by educators and the failure of teachers to act as role models is also a factor in the collapse of morale among students (Birhan et al., 2021). Therefore, it cannot be denied that a structured procedure is needed by teachers in delivering the content of moral education subjects.

Suggestion to improve the teaching process

Transformation in the implementation of a teaching process can be executed via several suggestions and cooperation from all parties. According to Nguyen NTL (2023), it was suggested that the evaluation of teachers at the school level should be carried out based on competence rather than performance. If the development of competence is important, then teachers will try to improve their competence. Meanwhile, Omar et.al., (2020) think that the sharing of experience about knowledge, skills, and behaviour as a teacher by veteran and experienced teachers can be used as a guide by new teachers. The sharing of knowledge and experience can help novice and non-optional teachers of a subject in improving the competencies needed in the teaching process.

Moreover, in order to improve this situation, Mat said et.al (2023) suggested that a more specific and strategic competence development program is needed to improve teacher competence holistically. In this effort, the administration, that is, school administration, educational institutions, and the ministry need to join hands in planning appropriate competency programs for an effective teaching process. Therefore, Ghiațău (2015) thinks that a special approach to ethical competence needs to be developed in terms of theoretical and practical knowledge. Additionally, Thambu (2024) suggests that novice teachers need to improve their competence in the relevant aspects, and cooperation from the school and the Ministry of Education is essential in overcoming this situation.

Additionally, Nahar and Safar (2017) suggested several steps to improve knowledge competence among teachers, namely through holding specialization for each discipline to facilitate teachers to deepen their knowledge of the discipline, teachers are given continuous training through courses or workshops by the KPM, and teachers can attend knowledge gatherings and share knowledge through virtual discussions at the school, district, or state level through WhatsApp, Telegram, and so on. This context is also supported by Rural (2021), which suggests holding capacity-building programs, workshops, training, seminars, and focus group discussions to improve teacher assessment competence.

Conclusion

The concept paper is expected to provide an understanding of the competencies among teachers for the teaching process and challenges in the implementation of the teaching process. Based on the discussion above, it is clear that there are various competencies needed among teachers to upgrade the teaching process. Each competency is important in order to enhance teachers' quality and also the quality of the teaching process. Finally, this concept paper is also expected

to enlighten the ministry, State Education Department (JPN), District Education Office (PPD), school, and community levels about the importance of competencies among teachers in the effort to improve the teaching process. This matter should be taken seriously, as the development of the student is not only seen from the aspect of mastery in the academic field but also instills good values so that the student becomes a person of noble character and benefits himself, the community, and the country.

Bibliography

- Abidin C. (2021). Mapping Internet celebrity on TikTok: Exploring attention economies and visibility labours. *Cultural Science Journal*, 12(1), 77–103.
- Ahmad.N, Kamarudin.M.K & Jasmi.A.K. (2017). The Concept of Teachers' Personality in Shaping Students' Characters in *Research Journal of Education*. 3(11), 157-163. ISSN: 2413-0540.
- Ambotang, A. S., & Anuar, L. (2023). Pengaruh Pengetahuan Pedagogi, Pengetahuan Kandungan dan Komitmen Guru Terhadap Kualiti Pengajaran. *Jurnal Pemikir Pendidikan*, 11(1), 50–60. <https://doi.org/10.51200/jpp.v11i1.4279>
- Anuas. S.A.A & Affandi.H.M (2018). pengetahuan pedagogi isi kandungan dalam kalangan guru pemulihan khas di malaysia. - prosiding seminar pendidikan transdisiplin.
- Bengtsson, J., Byberg, S., Carstensen, B., De Stavola, B. L., Svensson, J., Jørgensen, M. E., & Rod, N. H. (2020). Accumulation of childhood adversities and type 1 diabetes risk: a register-based cohort study of all children born in Denmark between 1980 and 2015. *International Journal of Epidemiology*, 49(5), 1604–1613. <https://doi.org/10.1093/ije/dyaa138>
- Bhatti, M. H., Ju, Y., Akram, U., Bhatti, M. H., Akram, Z., & Bilal, M. (2019). Impact of Participative Leadership on Organizational Citizenship Behavior: Mediating Role of Trust and Moderating Role of Continuance Commitment: Evidence from the Pakistan Hotel Industry. *Sustainability*, 11(4), 1170. <https://doi.org/10.3390/su11041170>
- Birhan, W., Shiferaw, G., Amsalu, A., Tamiru, M., & Tiruye, H. (2021). Exploring the context of teaching character education to children in preprimary and primary schools. *Social Sciences & Humanities Open*, 4(1), 100171. <https://doi.org/10.1016/j.ssaho.2021.100171>

- Channa.W.M., & Sahito.Z. (2022). Pedagogical Competencies Of Teachers And The Achievement Of Students: Explorations Of Best Practices Through A Literature Review. *Webology* (ISSN: 1735-188X) Volume 19, Number 3, 2022.
- Christiansen J, Qualter P, Friis K, Pedersen SS, Lund R, Andersen CM, Bekker-Jeppesen M, Lasgaard M (2021). Associations of loneliness and social isolation with physical and mental health among adolescents and young adults. *Perspect Public Health*. 2021 Jul;141(4):226-236. doi: 10.1177/17579139211016077. Epub 2021 Jun 19. PMID: 34148462.
- Daminov, O., Tulaev, B., Khimmataliev, D., Shakov, V., & Kurbonova, Z. (2020). The role of competence and competent in preparing professional training teachers for professional activity. *International Journal of Advanced Science and Technology*, 29, 6338-6349.
- Degago, A. T., & Kaino, L. M. (2015). Towards Student-Centered Conceptions of Teaching: The Case of Four Ethiopian Universities. *Teaching in Higher Education*, 20, 493- 505. <https://doi.org/10.1080/13562517.2015.1020779>
- Emaliana, I. (2017) Teacher-Centered or Student-Centered Learning Approach to Promote Learning? *Journal Sosial Humaniora*, 10, 59-70.
- Fakhruddin.A.M, Annisa,Putri.L.O dan Sudirman.P.R.A.T. (2023). Kompetensi Seorang Guru dalam Mengajar. *Journal on Education* Volume 05, No. 02, Januari-Februari 2023, pp. 3418-3425 E-ISSN: 2654-5497, P-ISSN: 2655-1365. <http://jonedu.org/index.php/joe>.
- Fitriyah, R. N. (2019). Pengembangan kompetensi guru di era revolusi industri 4.0 melalui pendidikan dan pelatihan [teacher competency development in the industrial revolution era 4.0 through education and training]. In *Prosiding Seminar Nasional Multi Disiplin Ilmu Dan Call For Papers Unisbank* [Proceedings of the Multi-Discipline National Seminar and Call For Papers Unisbank](pp. 359–364). <https://bit.ly/3sownfO>
- Gage, N. L. (1963). A Method for "Improving" Teacher Behavior. *Journal of Teacher Education*, 14(3), 261-266. <https://doi.org/10.1177/002248716301400306>
- Ghiațău, R. (2015). Ethical Competence for Teachers: a possible model. *Symposion*, 2(3), 387–403. <https://doi.org/10.5840/symposion20152325>
- Hasanah, N., Budiningsih, I., A'yun, Q., & Fahrudin, M. (2023). The Importance Of Pedagogical Competence On Developing Lecturers' Professional Career: An Evaluative Research. *Akademika*, 12(02), 467–478. <https://doi.org/10.34005/akademika.v12i02.3161>
- Irsyad, N., Rifma, N., & Anisah, N. (2020). The Analysis of Teacher's Pedagogical Competence in the Implementation of Character Education in High School (SMA) Koto

- Tengah District. *Advances in Social Science, Education and Humanities Research*, Volume 405. <https://doi.org/10.2991/assehr.k.200217.015>
- Jantan, Y., & Piaw, C. Y. (2017). Kompetensi Guru Dalam Membentuk Sahsia Pelajar Sekolah. *JuPiDi: Jurnal Kepimpinan Pendidikan*, 4(3), 1–12. <https://adum.um.edu.my/index.php/JUPIDI/article/view/8468>
- Kraft, M. A., & Christian, A. (2022). Can Teacher Evaluation Systems Produce High-Quality Feedback? An Administrator Training Field Experiment. *American Educational Research Journal*, 59(3), 500-537. <https://doi.org/10.3102/00028312211024603>
- Kumar, M. S. (2013). The influence of teacher's professional competence on students' achievement. *IOSR Journal of Engineering (IOSRJEN)* 3 (11): 12-18.
- Kurnia Irmawati, D., Widiati, U., & Cahyono, B. (2017). How Do Indonesian Professional English Teachers Develop Their Pedagogical Competence in Teaching Implementation? *Arab World English Journal (AWEJ)* Volume, 8.
- Leite, F. N., Hoji, E. S., & Júnior, H. A. (2018). Collaborative teaching and learning strategies for communication networks. *The International journal of engineering education*, 34(2), 527-536.
- Lukman, L., Marsigit, M., Istiyono, E., Kartowagiran, B., Retnawati, H., Kistoro, H. C. A., & Putranta, H. (2021). Effective teachers' personality in strengthening character education. *International Journal of Evaluation and Research in Education*, 10(2), 512. <https://doi.org/10.11591/ijere.v10i2.21629>
- Mat Said A.R, Che Omar N & Ghazali.M.A (2023). Meningkatkan pembangunan profesional dan kompetensi Guru Kementerian Pendidikan Malaysia: satu analisis kritis. *Global Journal of Education Research & Management (GERMANE)*, 3 (1). pp. 63-71. ISSN e-ISSN 2805-4695
- Maulana, H., Kholbi, S. N., Syafei, D. M., & Herlina, L. (2021). Charactered Teachers' Personality Competencies within Social Interactions. *Jurnal Belaindika : Pembelajaran Dan Inovasi Pendidikan/Jurnal Belaindika*, 3(1), 9–14. <https://doi.org/10.52005/belaindika.v3i1.62>
- Merkt, M. (2017). The importance of academic teaching competence for the career development of university teachers: A comment from higher education pedagogy. *GMS Journal for Medical Education* 2017, 34(4), 1-4.
- Nahar, N., & Safar, J. (2017). Jawi Teaching Practice of Islamic Studies Teachers in Jasin District Primary School, Malacca: A Pilot Study. *Man in India*, 97, 91-99.

- Nellitawati, N. 2020. How do the principals' democratic leadership styles contribute to teacher performance? *Journal of Educational and Learning Studies*, 3 (1).
- Nguyen, N. T. L. (2023). How to develop four competencies for teacher educators. *Frontiers in Education*, <https://doi.org/10.3389/feduc.2023.1147143>
- Omar, A. R. C., Ishak, S., & Jusoh, M. A. (2020). The impact of Covid-19 movement control order on SMEs' businesses and survival strategies. *Geografia-Malaysian Journal of Society and Space*, 16(2), 90–103.
- Pahrudin., Martono, T. & Murtini, W. (2016). The Effect of Pedagogic Competency, Personality, Professional and Social Competency Teacher to Study Achievement of Economic Lesson in State Senior High School of East Lombok District Academic Year 2015/2016. *ICTTE*, Vol-3, Issue-1.
- Parveen, S. & Srivastava, N. (2020). A Study of Teaching Competency of Upper Primary School Teachers of Central and State Government Schools. *International Journal of Creative Research Thoughts (IJCRT)*. | Volume 8, Issue 10.
- Rural.J.D (2021). Competency in Assessment of Selected DepEd Teachers in National Capital Region *European Online Journal of Natural and Social Sciences*, Vol 10, No 4 (2021)
- Santoso, J. (2019). Pengaruh Kualitas Produk, Kualitas Pelayanan, dan Harga terhadap Kepuasan dan Loyalitas Konsumen. *Jurnal Akuntansi Dan Manajemen*, 16(1), 127 - 146. <https://doi.org/10.36406/jam.v16i01.271>
- Selvi, T.K.(2017). What do teachers need to equip students with skills for a fast-evolving world? Retrieved from: <https://www.thehindu.com/profile/author/T-Kalai-Selvi-6736/teaching-competencies/The-Hindu>
- Shelly, C., Nuraida, I., & Oktaviana, F. (2020). An Analysis of Teacher pedagogical competence in Teaching English at SMK PGRI 3 Kota Serang. *Journal of English Language Teaching and Literature (JELTL)*, 3(1), 54-65. <https://doi.org/10.47080/jeltl.v3i1.787>
- Shulman, L. S. (1992). Knowledge and teaching: Foundation of the new reform. *Harvard Educational Review*, 57 (1), 1-22.
- Singh, A. K. M., & Singh, H. S. S. J. (2022). The Relationship of Teachers' Leadership Competency with 21st Century Teacher. *International Journal of Academic Research in Economics and Management and Sciences*, 11(1), 28-55. (4) (PDF) The Relationship of Teachers' Leadership Competency With 21st Century Teacher. https://www.researchgate.net/publication/359207438_The_Relationship_of_Teachers'_Leadership_Competency_With_21st_Century_Teacher

- Siregar, N. C., Rosli, R., Maat, S. M., & Capraro, M. M. (2020). The effect of science, technology, engineering and mathematics (STEM) program on students' achievement in mathematics: A meta-analysis. *International Electronic Journal of Mathematics Education*, 15(1), 1-12. <https://doi.org/10.29333/iejme/5885>
- Sudrajat, J. (2020). Kompetensi Guru Di Masa Pandemi Covid-19. *Jurnal Riset Ekonomi dan Bisnis*. Vol 13 (1) (2020) 100-110. ISSN 2580-8451
- Sulaiman, J., & Ismail, S. N. (2020). Teacher Competence and 21st Century Skills in Transformation Schools 2025 (TS25). *Universal Journal of Educational Research*, 8(8), 3536–3544. <https://doi.org/10.13189/ujer.2020.080829>
- Thambu, N. (2024). Kompetensi dan Kekangan Guru Novis Dalam Pengajaran dan Pembelajaran Pendidikan Moral di Sekolah Menengah. *Asian Pendidikan*, 4(1), 23-34. <https://doi.org/10.53797/aspen.v4i1.3.2024>
- Tolochko, S. (2019). Integrated competence of teaching and academic staff for the system of postgraduate pedagogical education. *ScienceRise: Pedagogical Education*, 1 (28), 22-29.
- UNESCO (2016). *Education for People and Planet: Creating Sustainable Futures for All. Global Education Monitoring Report*. Paris: UNESCO.
- Wang, Y. (2022). A comparative study on the effectiveness of traditional and modern teaching methods. *Advances in Social Science, Education and Humanities Research*, 270-277. DOI: 10.2991/978-2-494069-89-3_32
- Zakaria, I. B., Nor, M. Y. B. M., Alias, B. S. B., & A. Hamid, A. H. (2021). The 21 influence of principals' strategic leadership on students' outcome. *International Journal of Academic Research in Business and Social Sciences*, 11(2), 407-417.
- Zamri, N. B. M., & Hamzah, M. I. B. (2019). *Teachers' Competency in Implementation of Classroom Assessment in Learning*. *Creative Education*, 10, 2939-2946. <https://doi.org/10.4236/ce.2019.1012218>