

# Managerial Competency and Social Competency of School Principals in Improving the Quality of Education in Vocational Schools

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## Abstract

**Keywords:**  
Managerial  
Competence,  
Social Competence of  
School Principals,  
Quality  
Improvement.

Successful education in achieving school goals requires the competence of the school principal. Principal competency is the ability possessed by the principal in terms of planning, organizing, developing and supervising educational institutions to utilize existing resources to achieve quality learning and quality education. This research aims to find out the managerial and social competence of school principals in improving the quality of education at state vocational schools in Banda Aceh City. This research uses quantitative methods. Questionnaires, interviews, and observation are all used as data collection methods. Qualitative and quantitative descriptive analysis are the methods of data analysis employed. The R-squared test, which shows that the management competency variable has an R-squared value of 0.893, indicating that the model research can explain 89% of the variation in this variable, makes it a powerful model. Research findings show that managerial and social competencies influence improving the quality of education in schools. In the meantime, the social competency variable is regarded as moderate because its R-squared value of 0.655 indicates that the model accounts for 65% of the variation.

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## Abstrak

**Kata kunci:**  
Kompetensi  
Manajerial,  
Kompetensi Sosial  
Kepala Sekolah, dan  
Peningkatan Mutu

Pendidikan yang berhasil dalam mencapai tujuan di sekolah membutuhkan kompetensi kepala sekolah. Kompetensi kepala sekolah adalah kemampuan yang dimiliki oleh kepala sekolah dalam hal merencanakan, mengorganisasikan, mengembangkan dan mengawasi lembaga pendidikan untuk dapat memanfaatkan sumberdaya yang ada untuk tercapainya mutu pembelajaran dan mutu pendidikan yang berkualitas. Adapun tujuan penelitian ini adalah untuk mengetahui kompetensi manajerial dan kompetensi sosial kepala sekolah dalam meningkatkan mutu pendidikan di SMK Negeri Kota Banda Aceh. Penelitian ini menggunakan metode kuantitatif. Teknik pengumpulan data menggunakan observasi, wawancara, dan angket. Adapun teknik analisis data yang digunakan adalah analisis deskriptif kualitatif dan kuantitatif. Berdasarkan temuan penelitian, didapati bahwa kompetensi manajerial dan sosial berpengaruh terhadap peningkatan mutu pendidikan di sekolah yang dilihat berdasarkan pengujian R-squared yang mengindikasikan bahwa variabel kompetensi manajemen memiliki nilai R-squared sebesar 0,893, menunjukkan bahwa 89% variasi dalam variabel tersebut dapat dijelaskan oleh model penelitian, menjadikannya model yang kuat. Sedangkan variabel kompetensi sosial memiliki nilai R-squared sebesar 0,655, menunjukkan bahwa 65% variasi dijelaskan oleh model, sehingga dianggap moderat.

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## INTRODUCTION

Schools, as educational institutions, are organizations that have an important role in providing services to the community. Vocational High Schools have an important role in the world of education (Yudha & Mandasari, 2021). Vocational High Schools have a unique vision and mission, not only providing education but also preparing graduates who can immediately enter the world of (Apriana, Kristiawan, & Wardiah, 2019; Malik, 2018; Suharno, Pambudi, & Harjanto, 2020). In the increasingly rapid development of the industrial world, Vocational High Schools must be able to produce graduates who have practical skills and knowledge that meet the demands of the job market (Azman, Simatupang, Karudin, & Dakhi, 2020; Lauder & Mayhew, 2020; Teng, Ma, Pahlevansharif, & Turner, 2019). However, there are challenges faced by vocational school graduates in the world of work, including the gap between the skills taught in school and those required by industry, as well as the lack of recognition of Vocational High School qualifications (Donald, Ashleigh, & Baruch, 2018; McGunagle & Zizka, 2020; Pang, Wong, Leung, & Coombes, 2019). The role of the principal in managing Vocational High Schools is closely related to the managerial and social competence of the principal (Naidoo, 2019; Rusilowati & Wahyudi, 2020; Sebastian, Camburn, & Spillane, 2018). Managerial competency involves the principal's ability to plan, organize, and manage resources effectively (Arhipova, Kokina, & Michaelsson, 2021; Komalasari, Arafat, & Mulyadi, 2020; Owan & Agunwa, 2019). Meanwhile, school principals' social competence is necessary to build good relationships with various parties, such as teachers, students, industry, and the community.

Based on direct observations made at 8 Vocational High Schools in Banda Aceh City, it was found that implementing the managerial and social competencies of school principals was ineffective. Some of the problems identified include school principals not being optimal in managing teachers and education staff, as evidenced by the fact that there are still teachers who arrive late and do not fill in absences. Apart from that, the development of an appropriate curriculum between schools and industry is not yet optimal, communication with subordinates is not good, and relations with school partners, parents of students, and the community have not been managed well.

In order to raise the standard of instruction, school principals' managerial proficiency is especially important. The principal of a school needs to possess social, managerial, supervisory, entrepreneurial, and personal abilities. This aligns with the Minister of National Education Regulation Number 13 of 2007, which highlights how crucial these competencies are to assisting school principals in carrying out their duties. This claim is further supported by a study by Torlak (2019), which demonstrates a strong correlation between learning quality and leadership. The significance of school principals' managerial competencies is further supported by additional research by Mwaura (2023), who discovered a strong correlation between the caliber of school administration and school principals' proficiency in utilizing information and communication technology (I.C.T.). Conversely, Chen (2020) found

that the effectiveness of teachers is positively and significantly impacted by the managerial skills of school principals (Alwi & Mumtahana, 2023; Arifin, Juharyanto, Mustiningsih, & Taufiq, 2018; Attsaury, Hadiyanto, & Supian, 2024).

Apart from managerial competence, the social competence of the school principal also plays an important role. This competency includes the ability to establish good relationships with various parties in the school environment, including teachers, students, parents and the community (Brajša-Žganec, Merkaš, & Šakić Velić, 2019). According to Rahmadani (2020) social competence is effectiveness in interacting and meeting development needs in both the short and long term. Hurlock in Huber (2018) states that social competence is a person's ability to relate to others and be involved in satisfying social situations, which is also important for social acceptance. Minister of National Education Regulation no. 13 of 2007 lists social sensitivity toward other individuals or groups, involvement in extracurricular activities, and cooperation with other parties for the benefit of the school as indicators of a principal's social competency. Without good social competence, school principals will have difficulty developing a harmonious and productive school (Arhipova dkk., 2021; Ibrahim Bafadal, Bafadal, Yusuf Sobri, Nurabadi, & Gunawan, 2019; Komalasari dkk., 2020).

Based on the analysis of previous research, researchers then carried out initial observations in several vocational schools in Banca Aceh. They found several problems in the field related to the implementation of managerial competence and social competence of madrasa heads with the performance of educational staff. This prompted the author to conduct research because he saw that there was a lot of progress in the field of education so education managers and school principals were needed who would be able to improve the quality of education. Therefore, the author is interested in researching the managerial competence and social competence of madrasah teachers in improving the quality of education because several previous studies have not studied this, especially research in all vocational schools in Banda Aceh. This research aims to analyze the influence of managerial competence and social competence on improving the quality of education in vocational schools in Banda Aceh.

## **RESEARCH METHODS**

This research uses descriptive quantitative methods. This research uses 3 variables consisting of managerial competence (X1) & social competence (X2), as the independent variable and education quality (Y) as the dependent variable. This research involved 54 participants including 1 principal, 1 school supervisor, 1 deputy principal for public relations, 1 deputy principal for curriculum, 14 teachers at each school at SMKN 2 Banda Aceh, SMKN 3 Banda Aceh and SMKN 4 Banda Aceh.

methods for gathering data include surveys, interviews, and observation. Programs that have been implemented to raise the standard of education are observed, as are the processes of learning. methods for conducting interviews about the efforts made to raise the standard of instruction in schools. In the meantime, participants were

handed questionnaires to determine how they felt about school principals' social and managerial skills.

The instrument used in this research was a questionnaire comprising 10 statements related to managerial competence, social competence, and educational quality with a Likert scale of 1-5. Data analysis in this research uses qualitative and quantitative approaches. Qualitative analysis in this research is to determine the resource management process for facilities and infrastructure implemented in elementary schools obtained from the results of observations and interviews. A quantitative approach is used to determine the influence of managerial and social competencies on improving the quality of education using SmartPLS 3.

## RESULT AND DISCUSSION

### Result

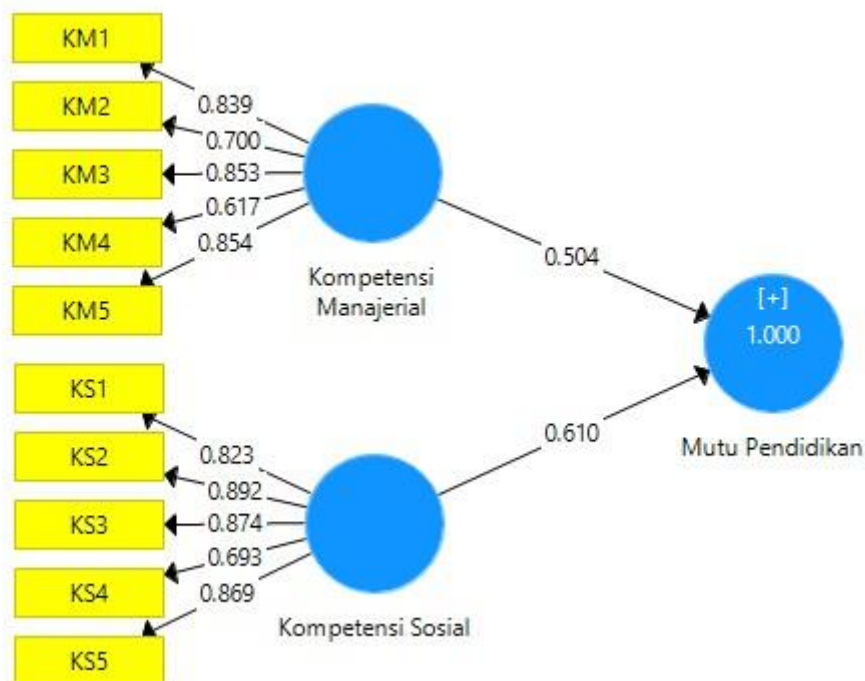
#### Testing Convergent Validity

Convergent validity in measurement model analysis can be demonstrated by the outer loading value. The validity of a measurement item can be confirmed if it has a coefficient greater than 0.50 and significance at the 5% level or t-statistic of 1.96 (Purwanto, Asbari, Santoso, Sunarsi, & Ilham, 2021). The following is a table of outer loading values.

**Table 1.** Outer Loading Value

	Managerial Competence	Social Competence	Quality of Education
KM1	0.839		
KM1			0.750
KM2	0.700		
KM2			0.618
KM3	0.853		
KM3			0.644
KM4	0.617		
KM4			0.459
KM5	0.854		
KM5			0.850
KS1		0.823	
KS1			0.692
KS2		0.892	
KS2			0.778
KS3		0.874	
KS3			0.824
KS4		0.693	
KS4			0.685
KS5		0.869	
KS5			0.821

Loading factor values between 0.5 and 0.7 are considered valid, so it can be concluded that all indicators fall into the adequate validity category. From this table, most of the indicators in the factors studied have high outer loading values, indicating that they are valid in measuring the appropriate factors.



Figures 1. Outer Loading Value

Figure 1 shows that the outer loading value is bigger than 0.50, and the t-statistic value exceeds 1.96. Therefore, it can be concluded that all items in this research variable have met the requirements for convergent validity.

**Discrimination Validation Testing**

By comparing each variable's root AVE coefficient ( $\sqrt{AVE}$ ) with the correlation value between it and the other variables in the model, the measurement model analysis for discriminant validity can be assessed. If the AVE value surpasses 0.50 and the AVE root value is higher than the correlation value between the variables in the study model, the variable is said to have successful validity (Fithri, Hasan, Syafrizal, & Games, 2024). The following is a table showing the results of measuring discriminant validity.

**Table 2.** Discrimination Validation Results

	Average Variance Extracted (AVE)
Management Competency	0.607
Social Competence	0.694
Quality of Education	0.511

Table 2 shows that all constructs' AVE values show numbers exceeding 0.50. Apart from that, the  $\sqrt{AVE}$  value of all constructs also exceeds the correlation value between one construct and another. Therefore, the conclusion that can be drawn is that all constructs in this study meet the requirements for discriminant validity.

### Reliability Testing

Reliability testing evaluates the reliability of constructs or latent variables in a measurement model. Reliability evaluation is based on two criteria, namely the composite reliability value and Cronbach's alpha value. When Cronbach's alpha and composite reliability values are more than 0.70, a latent variable is deemed reliable (Hair, Howard, & Nitzl, 2020). The results of reliability testing using SmartPLS version 3.3.9 appear in the following table.

Table 3. Reliability Testing

	Cronbach's Alpha
Management Competency	0.835
Social Competence	0.887
Quality of Education	0.834

All of the latent variables in this investigation have composite reliability, and Cronbach's alpha values are greater than 0.70, according to the data in Table 3. As a result, it can be said that these variables satisfy dependability requirements.

### R-Squared Testing

*R-squared* is used to indicate how big endogenous variables produce an impact. Apart from that, R-squared also provides an overview of the strengths or weaknesses of a research model. A strong model is one whose R-squared value is 0.75; a moderate model is one whose value is 0.50; and a poor model is one whose value is 0.25 (Dan-asabe, Yaro, Yawas, & Aku, 2019). The R-squared value can be seen in the following table.

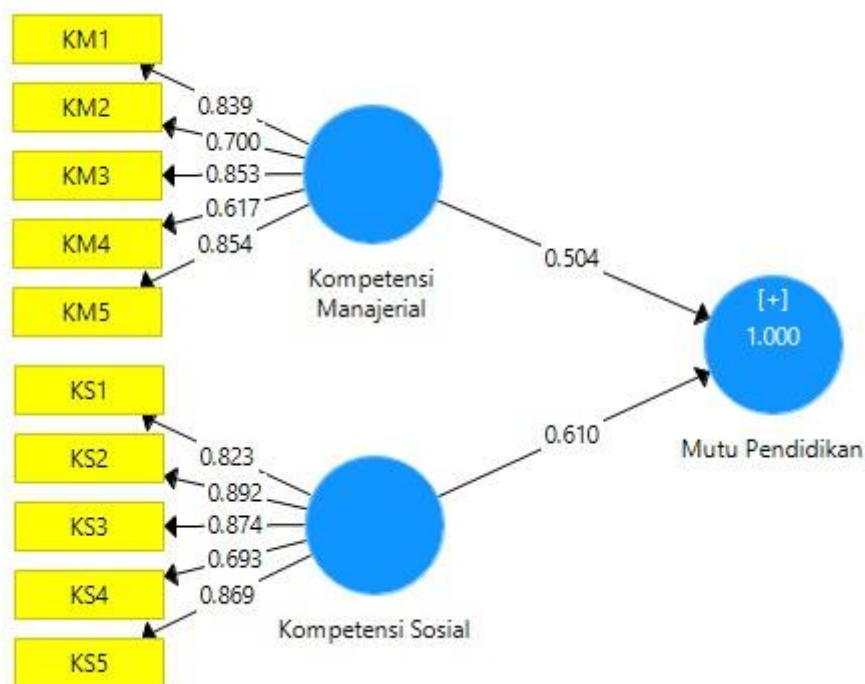
Table 4. R Square Results

	R Square	Adjusted R Square
Management Competency	0.893	0.891
Social Competence	0.655	0.648

The R-squared for the managerial competency variable is 0.893. This demonstrates that the endogenous variables found in the study model account for about 89% of the variation observed in the managerial competency variable. This model is deemed strong because the R-squared value is more than 0.75 according to the previously mentioned criterion. The R-squared for the social competency measure is 0.655. This indicates that endogenous variables in the study model account for about 65% of the variation seen in the social competency variable. The R-squared value of this model falls between 0.25 and 0.50, so it is categorized as moderate.

### Hypothesis test

The purpose of hypothesis analysis is to assess how exogenous variables affect endogenous variables. Finding out if the hypothesis can be accepted or rejected is the goal of the hypothesis testing process. The t-statistic and p-value are interpreted to provide a signal for accepting or rejecting the hypothesis. The link between the variables is deemed significant when the p-value is less than 0.05 and the t-statistic value is more than 1.96 (Kennedy-Shaffer, 2019). Using the Bootstrapping approach and SmartPLS 3.3.9 software, this hypothesis testing was conducted. The following is a presentation of the hypothesis analysis results.



Figures 2. Bootstrapping Results

Bootstrapping results can reveal the impact between variables as depicted in Figure 2. If the original sample shows a positive value, then the effect will tend to be positive, and vice versa. The results of this research hypothesis test are presented in the following table.

Table 5.  
Hypothesis Test Results

	Original Sample (O)	t-statistic	P Values
Management Competency→Quality of Education	0.945	48,654	0,000
Social Competence→Quality of Education	0.809	7,325	0,000

- a. H1: The contribution of managerial competency to the caliber of education obtained is positively and significantly influenced. This is predicated on the t-statistic value of 48.654, the p-value of 0.000, and the initial sample value of 0.945. The initial sample value is positive, the p-value is less than 0.05, and the t-statistic value is more than 1.96. As a result, it is agreed upon that the variables have a substantial association.
- b. H2: Social skills positively and significantly affect the caliber of schooling one receives. This is predicated on the t-statistic value of 7.325, the p-value of 0.000, and the initial sample value of 0.809. The initial sample value is positive, the p-value is less than 0.05, and the t-statistic value is more than 1.96. As a result, it is agreed upon that the variables have a substantial association.

## Discussion

The R-squared test, which shows that the management competence variable has an R-squared value of 0.893, indicating that 89% of the variation in this variable can be explained by the research model, making it a powerful model, supports the conclusion drawn from the research results that managerial and social competence have an influence on improving the quality of education in schools. In the meantime, the social competency variable is regarded as moderate because its R-squared value of 0.655 indicates that the model accounts for 65% of the variation. The t-statistic and p-value meet the significant criteria, i.e., the t-statistic is more than 1.96, and the p-value is less than 0.05, indicating that management competence and social competence both positively and significantly influence the quality of education. This analysis supports the hypothesis.

This study confirms various other research findings by Aristianingsih et al. (2022) indicating a strong and favorable correlation between educational staff performance and managerial competence. The quality of the school can rise if the principal has strong managerial ability; on the other hand, if the principal has weak managerial ability, the school's quality may fall (Grissom & Bartanen, 2019; Laela, Hanafi, & Sudadio, 2023). School principals who have high social competence will find it easier to resolve differences in values with the community well so that they do not hinder the educational process (Auliah, Putra, & Novianti, 2022; Hopkins, Ferrell, Ferrell, & Hopkins, 2021). With good relationships with the community, the Principal can develop the quality of education easily because he always has support from the community (Admiraal, Schenke, De Jong, Emmelot, & Sligte, 2021; Kaso dkk., 2021).

This research shows that the managerial planning and social competence of school principals at Vocational Schools in Banda Aceh City in improving the quality of education is carried out in a comprehensive and structured manner. The planning process starts from revising the curriculum, establishing a vision and mission in accordance with government policy, to preparing school work plans (RKS), school development plans (RPS), and school activity plans and budgets (RKAS). The school principal uses a democratic leadership approach in decision making and holds annual work meetings to evaluate and develop strategies to improve the quality of education. It is hoped that the involvement of all policy stakeholders and commitment in preparing careful planning can achieve the goal of improving the quality of education.

The principals' managerial and social competence strategies in these schools encompass several crucial steps. These include motivating teachers to enhance their enthusiasm and performance in teaching. Coaching through scientific forums is an integral part of this strategy, where principals encourage teachers to share knowledge and experiences, and improve their skills through constructive discussions. Moreover, cooperation with parents and the surrounding community is vital, as their support can strengthen the education program and create a better learning environment.

Principals have a significant responsibility in keeping teaching staff and students motivated (Azman et al., 2020). They must ensure consistent implementation of all



school rules, fostering discipline that supports the teaching and learning process. Additionally, rewards for excellence serve as incentives, encouraging teachers and students to continually strive for better results.

This study's findings highlight four main aspects of focus: 1) The principal's social competence in planning to improve education quality; 2) Effective implementation of social competence in the school context; 3) Obstacles faced in implementing the program; and 4) Solutions to overcome these challenges (Agustin & Kistoro, 2024; Azizah & Mardiana, 2024; Firmansyah, Ubaidillah, & Busriyanti, 2023). In terms of social competence, principals adopt a holistic approach. They involve internal parties—such as teachers, staff, and students—as well as external parties, including parents and community members, in planning and implementing education programs.

This approach aligns with expert views that education isn't solely about academics, but also involves character building and social competence. These social skills are crucial for students' futures, as they need the ability to interact, collaborate, and communicate effectively in an increasingly complex environment. Thus, focusing on social competence in education not only helps students achieve academic success but also prepares them to become individuals who can contribute positively to society.

However, several obstacles to improving the quality of education, such as budget limitations, lack of infrastructure, and teacher indiscipline, remain. School principals must seek solutions by holding regular deliberations and program evaluations to ensure that the improvement goes according to expectations.

## **CONCLUSION**

This research concludes that the managerial and social competence of school principals significantly influences the quality of education at Vocational Schools in Banda Aceh City. The R-squared test shows that the research model can explain 89% of the variation in managerial competence and 65% in social competence, indicating a strong and moderate influence, respectively. Managerially competent school principals can improve the quality of education, while social competence helps resolve differences in values with the community, gaining support for developing the quality of education. This research also identified several obstacles such as budget limitations, lack of infrastructure, and teacher indiscipline. To overcome this obstacle, it is recommended that school principals conduct regular evaluations and deliberations and develop innovative solutions to improve the quality of education. Limitations of this research include its limited coverage to Vocational Schools in Banda Aceh City and not including other external variables that might influence the quality of education. Further research is recommended to expand the scope and research variables to obtain a more comprehensive picture.

## REFERENCES

- Admiraal, W., Schenke, W., De Jong, L., Emmelot, Y., & Sligte, H. (2021). Schools as professional learning communities: What can schools do to support professional development of their teachers? *Professional Development in Education*, 47(4), 684–698. <https://doi.org/10.1080/19415257.2019.1665573>
- Agustin, A., & Kistoro, H. C. A. (2024). Measuring Fiqih Learning Achievement of Junior High School Students Reviewed From Spiritual Intelligence. *At-Tadzkir: Islamic Education Journal*, 3(2), 157–170. <https://doi.org/10.59373/attadzkir.v3i2.69>
- Alwi, M., & Mumtahana, L. (2023). The Principal's Strategy in Improving the Quality of Teacher Performance in the Learning Process in Islamic Elementary Schools. *Kharisma: Jurnal Administrasi Dan Manajemen Pendidikan*, 2(1), 66–78. <https://doi.org/10.59373/kharisma.v2i1.18>
- Apriana, D., Kristiawan, M., & Wardiah, D. (2019). Headmaster's competency in preparing vocational school students for entrepreneurship. *International Journal of Scientific and Technology Research*, 8(8), 1316–1330.
- Arhipova, O., Kokina, I., & Michaelsson, A. R. (2021). School Principal's Management Competences for Successful School Development. *Tiltai*, 79(1), 63–76. <https://doi.org/10.15181/tbb.v78i1.1757>
- Arifin, I., Juharyanto, Mustiningsih, & Taufiq, A. (2018). Islamic Crash Course as a Leadership Strategy of School Principals in Strengthening School Organizational Culture. *SAGE Open*, 8(3), 2158244018799849. <https://doi.org/10.1177/2158244018799849>
- Aristianingsih, R., Irawan, I., & Sulhan, M. (2022). Kompetensi Manajerial Kepala Madrasah Dalam Kinerja Tenaga Kependidikan Di Madrasah. *Jurnal Isema: Islamic Educational Management*, 7(1), 43–52. <https://doi.org/10.15575/isema.v7i1.14390>
- Atstsaury, S., Hadiyanto, H., & Supian, S. (2024). Principal's Strategy to Improve Teachers Professional Competence. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 5(1), 1–10. <https://doi.org/10.31538/munaddhomah.v5i1.775>
- Auliah, Y., Putra, I. N. N. A., & Novianti, I. (2022). Pengaruh Kompetensi Manajerial, Supervisi Dan Sosial Kepala Sekolah Terhadap Mutu Pendidikan Di Smp Negeri Se-Kota Bima. *SCIENTIFIC JOURNAL OF REFLECTION: Economic, Accounting, Management and Business*, 5(2), 341–352. <https://doi.org/10.37481/sjr.v5i2.469>
- Azizah, I., & Mardiana, D. (2024). Learning Transformation: Increasing Student Achievement through Discovery Learning. *Dirasah International Journal of Islamic Studies*, 2(2), 155–166. <https://doi.org/10.59373/drs.v2i2.42>
- Azman, A., Simatupang, W., Karudin, A., & Dakhi, O. (2020). Link And Match Policy In Vocational Education To Address The Problem Of Unemployment. *International Journal Of Multi Science*, 1(6), 76–85.
- Brajša-Žganec, A., Merkaš, M., & Šakić Velić, M. (2019). The relations of parental supervision, parental school involvement, and child's social competence with school achievement in primary school. *Psychology in the Schools*, 56(8), 1246–1258. <https://doi.org/10.1002/pits.22273>
- Chen, J., & Guo, W. (2020). Emotional intelligence can make a difference: The impact of principals' emotional intelligence on teaching strategy mediated by instructional leadership. *Educational Management Administration and Leadership*, 48(1), 82–105. <https://doi.org/10.1177/1741143218781066>

- Dan-asabe, B., Yaro, S. A., Yawas, D. S., & Aku, S. Y. (2019). Statistical modeling and optimization of the flexural strength, water absorption and density of a doum palm-Kankara clay filler hybrid composite. *Journal of King Saud University - Engineering Sciences*, 31(4), 385–394. <https://doi.org/10.1016/j.jksues.2017.11.003>
- Donald, W. E., Ashleigh, M. J., & Baruch, Y. (2018). Students' perceptions of education and employability: Facilitating career transition from higher education into the labor market. *Career Development International*, 23(5), 513–540. <https://doi.org/10.1108/CDI-09-2017-0171>
- Firmansyah, C., Ubaidillah, U., & Busriyanti, B. (2023). Design of The “Merdeka Belajar” Program for Students of High School Education. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 4(1), 38–48. <https://doi.org/10.31538/munaddhomah.v4i1.328>
- Fithri, P., Hasan, A., Syafrizal, S., & Games, D. (2024). Validation Studies a Questionnaire Developed to Measure Incubator Business Technology Performance using PLS-SEM Approach. *Andalasian International Journal of Applied Science, Engineering and Technology*, 4(1), 64–78. <https://doi.org/10.25077/aijaset.v4i1.132>
- Grissom, J. A., & Bartanen, B. (2019). Principal effectiveness and principal turnover. *Education Finance and Policy*, 14(3), 355–382. [https://doi.org/10.1162/edfp\\_a\\_00256](https://doi.org/10.1162/edfp_a_00256)
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109(December 2019), 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hopkins, C. D., Ferrell, O. C., Ferrell, L., & Hopkins, K. H. (2021). Changing Perceptions of Marketing Ethics and Social Responsibility in Principles of Marketing. *Journal of Marketing Education*, 43(2), 244–259. <https://doi.org/10.1177/0273475321995553>
- Ibrahim Bafadal, I., Bafadal, I., Yusuf Sobri, A., Nurabadi, A., & Gunawan, I. (2019). Standards of Competency of Head of School Beginners as Leaders in Learning Innovation. *International Conference on Education and Technology*, 382, 13–18. <https://doi.org/10.2991/icet-19.2019.4>
- Kaso, N., Mariani, M., Ilham, D., Firman, F., Aswar, N., & Iksan, M. (2021). The Principal's Leadership: How to Improve the Quality of Teaching and Learning Process in State Junior High School of Luwu. *Jurnal Ad'ministrare*, 8(1), 49. <https://doi.org/10.26858/ja.v8i1.19126>
- Kennedy-Shaffer, L. (2019). Before  $p < 0.05$  to Beyond  $p < 0.05$ : Using History to Contextualize p-Values and Significance Testing. *American Statistician*, 73(sup1), 82–90. <https://doi.org/10.1080/00031305.2018.1537891>
- Komalasari, K., Arafat, Y., & Mulyadi, M. (2020). Principal's Management Competencies in Improving the Quality of Education. *Journal of Social Work and Science Education*, 1(2), 181–193. <https://doi.org/10.52690/jswse.v1i2.47>
- Laela, S., Hanafi, S., & Sudadio, S. (2023). Kompetensi Manajerial Kepala Sekolah Dalam Meningkatkan Mutu Sekolah Dasar Negeri. *Jurnal Educatio FKIP UNMA*, 9(2), 599–606. <https://doi.org/10.31949/educatio.v9i2.4868>
- Lauder, H., & Mayhew, K. (2020). Higher education and the labour market: An introduction. *Oxford Review of Education*, 46(1), 1–9. <https://doi.org/10.1080/03054985.2019.1699714>

- Malik, R. S. (2018). Educational Challenges in 21st Century and Sustainable Development. *Journal of Sustainable Development Education and Research*, 2(1), 9. <https://doi.org/10.17509/jsder.v2i1.12266>
- McGunagle, D., & Zizka, L. (2020). Employability skills for 21st-century STEM students: The employers' perspective. *Higher Education, Skills and Work-based Learning*, 10(3), 591-606. <https://doi.org/10.1108/HESWBL-10-2019-0148>
- Mwaura, H. (2023). *Influence Of School-Based Factors On Integration Of Information Communication And Technology In Teaching And Learning In Public Secondary Schools In Kinangop Sub-County, Nyandarua County, Kenya*. University of Nairobi.
- Naidoo, P. (2019). Perceptions of teachers and school management teams of the leadership roles of public school principals. *South African Journal of Education*, 39(2), 1-14. <https://doi.org/10.15700/saje.v39n2a1534>
- Owan, V. J., & Agunwa, J. N. (2019). Principals' administrative competence and teachers' work performance in secondary schools in calabar education zone of Cross River State, Nigeria. *Humanities and Social Sciences Letters*, 7(1), 20-28. <https://doi.org/10.18488/journal.73.2019.71.20.28>
- Pang, E., Wong, M., Leung, C. H., & Coombes, J. (2019). Competencies for fresh graduates' success at work: Perspectives of employers. *Industry and Higher Education*, 33(1), 55-65. <https://doi.org/10.1177/0950422218792333>
- Purwanto, A., Asbari, M., Santoso, T. I., Sunarsi, D., & Ilham, D. (2021). Education Research Quantitative Analysis for Little Respondents. *Jurnal Studi Guru dan Pembelajaran*, 4(2), 335-350. <https://doi.org/10.30605/jsgp.4.2.2021.1326>
- Rahmadani, D. (2020). Persepsi Guru Terhadap Kompetensi Sosial Kepala Sekolah Menengah Kejuruan (Smk) Negeri Di Kota Pariaman. *Bahana Administrasi Pendidikan*, 3(2), 953-1265.
- Rusilowati, U., & Wahyudi, W. (2020). The Significance of Educator Certification in Developing Pedagogy, Personality, Social and Professional Competencies. *Social and Humaniora Research Symposium*, 409(SoRes 2019), 446-451. <https://doi.org/10.2991/assehr.k.200225.095>
- Sebastian, J., Camburn, E. M., & Spillane, J. P. (2018). Portraits of Principal Practice: Time Allocation and School Principal Work. *Educational Administration Quarterly*, 54(1), 47-84. <https://doi.org/10.1177/0013161X17720978>
- Suharno, Pambudi, N. A., & Harjanto, B. (2020). Vocational education in Indonesia: History, development, opportunities, and challenges. *Children and Youth Services Review*, 115, 1-8.
- Teng, W., Ma, C., Pahlevansharif, S., & Turner, J. J. (2019). Graduate readiness for the employment market of the 4th industrial revolution: The development of soft employability skills. *Education and Training*, 61(5), 590-604. <https://doi.org/10.1108/ET-07-2018-0154>
- Torlak, N. G., & Kuzey, C. (2019). Leadership, job satisfaction and performance links in private education institutes of Pakistan. *International Journal of Productivity and Performance Management*, 68(2), 276-295. <https://doi.org/10.1108/IJPPM-05-2018-0182>
- Yudha, H. T., & Mandasari, B. (2021). The Analysis of Game Usage for Senior High School. *Journal of English Language Teaching and Learning (JELTL)*, 2(2), 74-79.