

Analysis of Strength, Weakness, Opportunities, and Threats in Planning to Improve the Quality of Education at SDN 003 Teluk Bayur, Berau Regency

Darus Winanten Piandani, Danu Pratomo, Anggunan Tunggal, Sukanti Sukanti, Syafril Hidayat, Nova Intan Soraya, Nurlaili Nurlaili, and Khusnul Khotimah

Department of Magister Educational Management, Universitas Mulawarman, Indonesia

Abstract: Elementary School (SDN) 003 Teluk Bayur, Berau Regency, as one of the elementary schools, must be able to compete with 7 other schools in its area so that its graduates can continue to the Junior High Schools available, because there are only 2 Junior High Schools in the area, which are highly contested by graduates from 8 elementary schools. Given this situation, SDN 003 must improve the quality of education at the school. One of the strategies to develop the school is to conduct a SWOT analysis to identify internal and external factors affecting the quality of education. The methods used include interviews, observation, documentation studies, and questionnaires. Based on the SWOT analysis conducted, there are 4 main indicators for each of the strengths, weaknesses, opportunities, and threats of the school. After calculating the IFAS and EFAS, the following sub-total scores were obtained: strengths 1.63, weaknesses 1.14, opportunities 1.44, and threats 1.18, with a total (S-W) score of 0.49 and a total (O-T) score of 0.26. This result indicates that SDN 003 Teluk Bayur is in Quadrant I (S-O), with its strengths enabling it to optimally utilize opportunities to improve the quality of education. The strategy used is an aggressive strategy, which includes strengthening partnerships with the school committee and local government, increasing the involvement of local companies, developing education programs based on local traditions and culture, and developing holistic character education programs.

Keywords: SWOT Analysis, IFAS, EFAS, Aggressive Strategy.

INTRODUCTION

Quality education is the key to creating a smart, creative, and competitive generation. To achieve this goal, good planning is very important. Steps that can be taken are to conduct a needs analysis to understand current conditions, including strengths and weaknesses, opportunities and threats, known as strengths, weaknesses, opportunities and threats (SWOT) analysis. With a SWOT analysis, schools are able to optimize strengths to cover weaknesses and are able to take advantage of opportunities to avoid obstacles so that they can plan the right strategy to improve the quality of education and from the results of the SWOT analysis, the quality of an educational institution can also be determined (Chaerani, *et al.*, 2023).

Budianto & Titik Haryati (2023) explain that factors that influence the quality of education in educational institutions are an integral part that cannot be separated. These factors support improving higher quality education and become indicators or standards for education and teaching.

(Siahaan, *et al.*, 2023) explain the importance of management in organizing an organization is absolutely necessary, likewise in education management is important. Institutions/companies engaged in the field of managing goods require good management. Educational institutions are institutions that manage humans and aim to create quality humans, of course this requires more extra thinking than goods management institutions.

SWOT analysis is an important thing to do to find out the internal and external conditions of the madrasah, so that the steps that will be taken in the future can improve the quality of education. In addition to the results of the SWOT analysis being able to determine future work plans, SWOT analysis can also determine the quality of the madrasah and the condition of the external environment so that it can face existing challenges. (Isamuiddin, *et al.*, 2021)

The results of the study show that the planning of the principal's managerial competency is carried out based on the school's vision, mission, goals, and needs (need assessment). The principal involves all elements of the academic community in planning school improvement and development. (Amon & Harliansyah, 2022)

Tadele (2017) in his article entitled SWOT Analysis for Educational Management emphasizes the importance of using SWOT analysis in educational management to increase the effectiveness and efficiency of educational institutions. Tadele explains that SWOT analysis is a very useful tool to help educational institutions in planning and implementing managerial strategies, as well as to identify challenges and opportunities that exist in the educational environment.

Fred R. David in his book Strategic Management: Concepts and Cases (2011) emphasizes that SWOT analysis is very important to help

educational institutions assess internal and external conditions, and formulate effective strategies to improve the quality and competitiveness of the institution. By analyzing strengths, weaknesses, opportunities, and threats, educational institutions can plan and implement strategic steps to face challenges, take advantage of opportunities, and achieve long-term goals in the world of education.

According to (Candra, *et al.*, 2022) the results of the implementation of SWOT analysis at SMK Negeri 3 Balikpapan, namely Strengths, namely education that 100% has a BA in various vocational fields and some have a Masters, with teacher certification. Weaknesses, namely the lack of fostering an entrepreneurial spirit in all educators. Opportunities, namely having quite a lot of partnerships, such as professional certification institutions (LSP-P1) and Tefa (teaching factory). Threats that must be faced are unifying the vision of education personnel, competition from external educational institutions, lack of education personnel, especially vocational teachers in one of the expertise competencies.

According to (Afriani, *et al.*, 2022) SMP Patra Dharma 2 Balikpapan based on the results of the SWOT analysis is in quadrant 1 which means a very favorable situation. The school has high or large opportunities and strengths, so it can take advantage of existing opportunities. The right strategy to apply in this condition is to support an aggressive growth policy (Growth oriented strategy)

According to (Iqbal & Wiyani, 2022) MI Al Hikmah Benda as an elementary school educational institution that has a pesantren climate is quite supported by the community in the surrounding environment. This is indicated by community leaders in the MI Al Hikmah Benda environment fully supporting it.

In line with previous research, (Sulistiyanto & Chotimah, 2023) said that SWOT analysis is very important in preparing strategic planning for madrasahs, both in the form of a 5-year Renstra (Strategic Plan) and a 4-year Madrasah Work Plan (RKM). There are many internal and external factors that can be identified using SWOT analysis as conducted by (Sodikin & Gumiandari, 2022) at MTs Negeri 9 Kuningan to determine the quality of learning obtained one of the weaknesses that exist is that some teachers have not mastered IT technology.

SWOT analysis is used to map schools in the SWOT quadrant. Whether in quadrant I, quadrant II, quadrant III or quadrant IV. Like the research conducted by (Chairiyah, *et al.*, 2024) at MTs Al Ridho Berau that the position of the school is in quadrant I or quadrant S-O, where the school has assets and strengths that can be used to capture opportunities from outside.

Hassan (2018) Hassan, Hassan (2018) in his book Strategic Educational Management uses SWOT analysis as an important tool in educational management to help educational institutions identify the strengths, weaknesses, opportunities, and threats that exist in their internal and external environments. Hassan emphasized that SWOT analysis enables educational institutions to plan more effective educational strategies and optimize available resources to improve the overall quality of education.

In Teluk Bayur sub-district, Berau Regency, there are 8 elementary schools with 2 secondary schools that are competed for by graduates from the 8 elementary schools every year. With so many elementary schools and limited secondary schools, schools must plan the right strategy to improve the quality of education in elementary schools in order to compete. Including how to shape student character. Systematic, measurable and based planning is something that cannot be denied by schools. Research conducted (Commission, 2016) describes the implementation of SWOT analysis in improving environmental management must be carried out as early as possible from elementary school. This shows the importance of planning and how to implement the planning with a strong foundation so that it is right on target according to school needs. Therefore, SWOT analysis is a data-based planning solution in order to improve the quality of education in schools.

RESEARCH METHOD

This study uses qualitative and quantitative methods (mixed method). Qualitative methods are used to identify internal factors (strengths and weaknesses) and external factors (opportunities and threats) using interview techniques, observation and documentation studies. Interviews were conducted with the principal, while observations were made of the environment, learning activities and facilities and infrastructure in the school. School policies, school vision and mission, and evaluation results were carried out through documentation studies. Quantitative methods were used to determine the weight and

rating of each indicator of internal and external factors using a questionnaire in the form of a googleform. This questionnaire was distributed to the principal, educators and education personnel and the data was obtained in the form of numbers, then processed to find the average. Researchers took samples at SD Negeri 003 Teluk Bayur, Berau Regency, in March 2025.

The first step begins with conducting research planning, by observing the environment and conducting a physical evaluation of the school. Then identify the potential and problems of the school, through document studies. The principal and teachers are involved in determining the strengths, weaknesses, opportunities and threats of the school. Data analysis used IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) matrix analysis techniques and SWOT (Strength, Weakness, Opportunity, Threat) matrix analysis. The steps in determining the SWOT analysis are as follows: (1) Identifying internal factors (strengths and weaknesses) and external factors (opportunities and threats) faced by the school; (2) Determining the main factors that affect the quality of the school, both strengths, weaknesses, opportunities and threats to the school; (3) Giving weight to each indicator of internal and external factors based on their level of importance, using a scale of 1 to 3 with a value of 1 (less important), 2 (equally important) and 3 (more important). (4) Determining the rating of each indicator with a scale of 4 based on its impact on the school. A score of 4 has the most impact on the school, while 1 has the least impact. Scoring on the aspects of strength and opportunity is positive, meaning that if the strength and opportunity are large, they are given a score of 4 and if the strength and opportunity are small, they are given a score of 1. While for weaknesses and threats, the opposite is true. Score 4 if the weaknesses and threats to the school are small, while score 1 if the weaknesses and threats to the school are large. (5) Calculate the total score for each internal and external factor by multiplying the weight by its rating for each indicator (Thomson, 2010).

With the calculation of IFAS and EFAS, the position of SDN 003 Teluk Bayur, Berau Regency can be known in which quadrant and what strategic steps must be taken. There are 4 quadrants where the determination of this quadrant is based on the Cartesian diagram. Strength and weakness factors occupy the Y axis while opportunities and threats are on the X axis.

Quadrant I (positive X axis, positive Y axis), or an aggressive strategy where schools in this position are strong and have the opportunity to develop faster and optimally in improving the quality of education. Quadrant II (positive X axis, negative Y axis) means that the school is weak but has opportunities and the strategy used is a diversification strategy. Quadrant III (negative X axis, positive Y axis) means that the school is strong but has threats. The strategy used is the turn around strategy (improvement), schools must have many strategies in dealing with various existing threats. Quadrant IV (negative X axis, negative Y axis) means that the school is weak and has major threats. The strategy used is a defensive strategy, the school tries to maintain internal conditions so that they do not decline further while thinking about future steps to improve itself.

RESULTS AND DISCUSSION

Based on the SWOT analysis conducted, the following internal factors (strengths and weaknesses) and external factors (opportunities and threats) were obtained that influence the quality of education at SDN 003 Teluk Bayur, Berau Regency:

1. Aspect of Strength
 - a. Many awards
 - b. Complete facilities and infrastructure
 - c. High commitment to character education
 - d. High discipline of educators and education personnel
2. Weaknesses:
 - a. Limitations of school information systems
 - b. Some educators are less adaptive to change
 - c. Some educators lack awareness of improving competence
 - d. Limited school land
3. Opportunities:
 - a. Partnership with school committee
 - b. Local government support
 - c. Hereditary tradition of sending children to school
 - d. Partnership with companies around the school
4. Threats:
 - a. High traffic area
 - b. Competition with other schools
 - c. Limited high schools
 - d. Security around the school

After identifying internal and external factors in the form of strengths, weaknesses, opportunities and threats, the next step is to determine a strategy

to improve school quality by creating a SWOT matrix.

Table 1: SWOT Matrix

	<p>Strength (S) Many awards Complete facilities and infrastructure High commitment to character education High discipline of educators and education personnel</p>	<p>Weaknesses (W) Limitations of school information systems Some educators are less adaptive to change Some educators lack awareness of improving competency Limited school land</p>
<p>Opportunity (O) Partnership with school committee Local government support Hereditary tradition of sending children to school Partnership with companies around the school</p>	<p>Strategy S-O The existence of teacher competence, complete facilities need to be improved. Cooperation with partnerships with surrounding companies to optimize student achievement.</p>	<p>Strategy W-O With government support, it is necessary to hold teacher training on commitments that must always be dynamic regarding changes in education policy and improving teacher competence.</p>
<p>Threat (T) High traffic area Competition with other schools Limitations of secondary schools Security around the school</p>	<p>Strategy S-T There needs to be infrastructure for traffic signs such as safe crossing places for children. Improving student achievement and character to become a school brand so that even though elementary schools are often the main choice.</p>	<p>Strategy W-T There is a need to improve teacher working group programs to share knowledge with colleagues.</p>

By knowing the strengths, weaknesses, opportunities and threats in SDN 003 Teluk Bayur, then the weighting of each item is carried out using a google form which is distributed to the principal, educators and education personnel. The answers from each respondent are then calculated on average and then the IFAS and EFAS analysis is carried out. For IFAS, the factors used are strengths and weaknesses, while to analyze EFAS, the factors taken into account are opportunities and threats.

The weight calculation is based on a pairwise comparison between two factors relatively based on their importance or influence on the school. With the level of importance using a scale of 1 to 3. The provisions are: a value of 1 if the horizontal indicator is less important than the vertical indicator, the value = 2 if the horizontal indicator is as important as the vertical indicator and if the horizontal indicator is more important than the vertical indicator then the value = 3,

The following is the IFAS calculation based on internal factors in the school.

Table 2: Calculation of IFAS Weight of SDN 003 Teluk Bayur

Internal Factors		A	B	C	D	E	F	G	H	Total	Credit
Many awards	A		2	3	2	2	3	2	2	16	0,14
Complete facilities and infrastructure	B	2		2	2	2	2	2	2	14	0,12
High commitment to character education	C	3	2		2	2	2	2	3	16	0,14
Discipline of educators and higher education personnel	D	3	3	2		2	3	2	3	18	0,15
Limitations of school information systems	E	2	1	2	2		2	1	2	12	0,10
Some educators are less adaptive to change	F	2	2	1	2	2		2	2	13	0,11
Some educators lack awareness of improving competency	G	2	2	2	2	2	2		3	15	0,13
Limited school land	H	2	2	2	2	2	2	2		14	0,12
	Total									118	1,00

After getting the weight of each indicator in the strength and weakness category, continue by determining the rating of each indicator and calculating the multiplication between the weight and its rating. The rating determination is given a

scale of 1 to 4. The most impactful to the school institution is given a rating of 4, the least impactful is given a rating of 1. Next, the score is calculated = BxR

Table 3: Results of IFAS Analysis of SDN 003 Teluk Bayur

Internal Factors	Credit (C)	Rate (R)	C x R
Strength			
Many awards	0,14	3	0,41
Complete facilities and infrastructure	0,12	3	0,36
High commitment to character education	0,14	3	0,41
Discipline of educators and higher education personnel	0,15	3	0,46
Total Score			1,63
Weaknesses			
Limitations of school information systems	0,10	3	0,31
Some educators are less adaptive to change	0,11	2	0,22
Some educators lack awareness of improving competency	0,13	2	0,25
Limited school land	0,12	3	0,36
Total Score	1,00		1,14

From the calculation results, the sub-total of strengths was 1.63 while the sub-total of weakness factors was 1.14.

Table 4: EFAS Weight Calculation

External Factors		A	B	C	D	E	F	G	H	Total	Credit
Partnership with school committee	A		2	2	2	2	2	2	2	14	0,12
Local government support	B	2		2	2	3	2	3	3	17	0,15
The hereditary tradition of sending children to school	C	2	2		2	3	3	2	2	16	0,14
Partnership with companies around the school	D	2	2	2		2	2	2	2	14	0,12
High traffic area	E	1	1	2	2		2	2	2	12	0,10
Competition with other schools	F	2	2	2	2	2		2	2	14	0,12
Limitations of secondary school	G	2	2	2	3	3	2		2	16	0,14
Security around the school	H	2	2	2	2	2	2	2		14	0,12
	Total									117	1,00

Table 5: Results of EFAS Analysis of SDN 003 Teluk Bayur

Faktor Internal	Credit (C)	Rate (R)	C x R
Opportunity			
Partnership with school committee	0,12	3	0,36
Local government support	0,15	3	0,44
The hereditary tradition of sending children to school	0,14	3	0,41
Partnership with companies around the school	0,12	2	0,24
Total Score			1,44
Threat			
High traffic area	0,10	3	0,31
Competition with other schools	0,12	3	0,36
Limitations of secondary school	0,14	2	0,27
Security around the school	0,12	2	0,24
Total Score	1,00		1,18

From the calculation results obtained sub total of opportunities 1.44 while the sub total of threat factors 1.18. Furthermore, by calculating the

difference between strengths and weaknesses and opportunities and threats with the following table.

Table 6: IFAS and EFAS Analysis

Internal Factors	Sub Total	External Factors	Sub Total
Strength	1,63	Opportunity	1,44
Weakness	1,14	Threat	1,18
Total (S-W)	0,49	Total (O-T)	0,26

Referring to the SWOT quadrant according to the Cartesian diagram with the Y axis depicting (Strength and Weakness), and the X axis (opportunity and Threat) then the SWOT quadrant consists of 4 quadrants namely the S-O quadrant (Strength-Opportunity), the W-O quadrant (Weakness-Opportunity), the S-T quadrant (Strength-Treat), and the W-T quadrant (Weakness-Treat). Based on the calculation of the IFAS and EFAS factor analysis and by considering the position of the SWOT quadrant, SDN 003 Teluk Bayur, Berau Regency is in quadrant I (S-O) using an aggressive strategy, namely where the strengths owned by the school are utilized as much as possible in utilizing existing school opportunities. Some of the strategies carried out are:

1. Strengthening Partnerships with School Committees and Local Governments

Strategy: Improving communication and collaboration with school committees and local governments to ensure that educational programs are fully supported and run well. This can also

include submitting proposals to obtain additional funds or needed facilities.

2. Increasing the Involvement of Companies Around the School

Strategy: Utilizing partnerships with surrounding companies to improve the quality of education and school welfare. This collaboration can include sponsorship, training, and procurement of facilities.

3. Developing Education Programs Based on Local Traditions and Culture

Strategy: Utilizing hereditary traditions in the surrounding community that send their children to school as an opportunity to promote educational values and increase parental participation.

4. Developing a Holistic Character Education Program

Strategy: Integrating character education into all aspects of school life, both in and outside the classroom, by involving all educators, students, and parents.

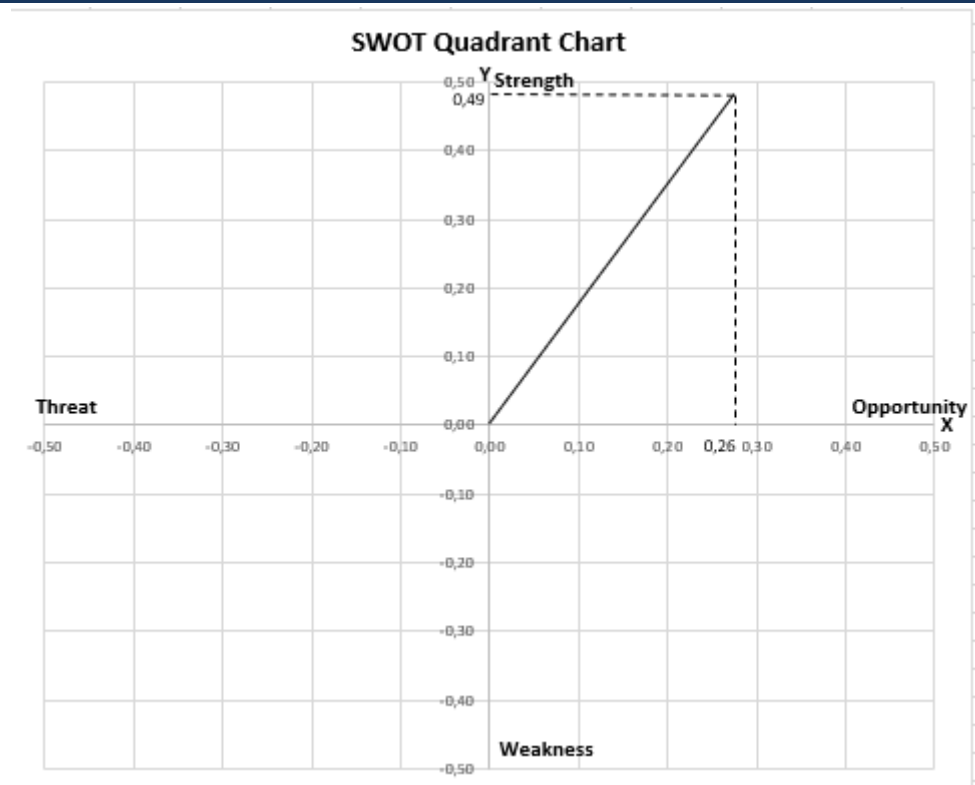


Figure 1: Position of SDN 003 Teluk Bayur

CONCLUSION

Internal strength factors of SD Negeri 003 Teluk Bayur, namely many awards, complete facilities and infrastructure, high commitment to character education, high discipline of educators and education personnel that affect the quality of education in schools can be utilized to achieve opportunities from outside the school in the form of increasing partnerships with the school committee and local government, promoting educational values and increasing parental participation and increasing the involvement of companies around the school. Based on the results of the IFAS and EFAS analysis, the school is in quadrant I (S-O) meaning that the school has strength as an internal factor that can be utilized optimally to achieve external opportunities. The resulting strategy is aggressive where schools are advised to optimally utilize the resources they have such as complete facilities and high teacher discipline. Schools can also work with committees, local governments and companies around for the progress of the school.

DAFTAR PUSTAKA

1. Afriani, R., Ardhyaningrum, R. S., Novayanti, N. & Mulawarman, W. G. "Strategi meningkatkan mutu tenaga pendidik dan kependidikan di SMP Patra Dharma 2 Balikpapan: Kajian analisis SWOT." *Jurnal Ilmu Manajemen dan Pendidikan (JIMPIAN)*, 2.2 (2022): 57–64.
2. Amon, L. & Harliansyah, H. "Analisis kompetensi manajerial kepala sekolah dalam perencanaan peningkatan mutu pendidikan menengah kejuruan." *Jurnal Ilmiah Manajemen dan Kewirausahaan*, 1.1 (2022): 147–162.
3. Budianto & Haryati, T. "Ramalia, 4. JPTR_Budiyanto 31." *Jurnal Pendidikan Terintegrasi*, 4.1 (2023).
4. Candra, S., Didie, M., I. G. B., Rahayu, N., D. O. & Mulawarman, W. G. "Implementasi analisis SWOT pada manajemen strategis dalam perencanaan peningkatan kompetensi siswa pada SMK Negeri 3 Balikpapan." *Jurnal Ilmu Manajemen dan Pendidikan (JIMPIAN)*, 2.2 (2022): 43–50.
5. Chairiyah, S. S., Hanifah, E., Rotua, E., Sitorus, B. & Khayati, N. "Analisis Strength, Weakness, Opportunities, and Threats dalam perencanaan peningkatan mutu pendidikan di Madrasah Tsanawiyah." *Edukatif: Jurnal Ilmu Pendidikan*, 6.5 (2024): 6183–6196.
6. Comission, E. "Implementasi analisis SWOT dalam perencanaan peningkatan manajemen lingkungan berbasis *green behavior* di sekolah dasar." 4.1 (2016): 1–23.

7. David, F. R. "Strategic Management: Concepts and Cases." *Pearson Prentice Hall*, (2011).
8. Hassan, A. "Strategic Educational Management." *Oxford University Press*, (2018).
9. Iqbal, M. & Wiyani, N. A. "Analisis SWOT pada pembelajaran terpadu di MI Al Hikmah Benda." *JISIP (Jurnal Ilmu Sosial dan Pendidikan)*, 6.2 (2022): 3897–3902.
10. Isamuddin, I., Faisal, F., Maisah, M., Hakim, L. & Anwar Us, K. "Implementasi analisis SWOT pada manajemen strategik dalam perencanaan peningkatan mutu pendidikan di Madrasah Tsanawiyah Nurul Islam Muara Bungo." *Jurnal Manajemen Pendidikan dan Ilmu Sosial*, 2.2 (2021): 1034–1050.
11. Purba, I. M., Rahmawati, R., Herman, H., Manihuruk, L. M. E., Saragih, M. C. I., Silaban, D. C., Sianturi, E., Rambe, K. R., Bangun, B., Munthe, B. & Sirait, T. R. "An implementation of internship program to enhance teaching experience for learners in schools." *AMK: UIKA Community Service*, 4.1 (2025): 32–39.
12. Saragih, N., Effendi, S., Silalahi, M., Siregar, L. & Herman. "The influence of self-efficacy and school culture on the job satisfaction of RK Bintang Timur Private Elementary School teachers." *Bulletin of Science Education*, 4.3 (2024): 29–38.
13. Siahaan, A., Akmalia, R., Ray, A. U. M., Sembiring, A. W. & Yunita, E. "Upaya meningkatkan mutu pendidikan di Indonesia." *Journal on Education*, 5.3 (2023): 6933–6941.
14. Sinaga, M., Efendi, E., Sherly, S., Siregar, L., Butarbutar, M. & Herman, H. "The effect of altruistic leadership on competencies with self-efficacy as intervening variables for the principal by YPK St. Yoseph Medan in Pematangsiantar." *Sarcouncil Journal of Education and Sociology*, 3.10 (2024): 1–9.
15. Sodikin, S. & Gumindari, S. "Analisis SWOT mutu evaluasi pembelajaran." *JDM (Jurnal Dinamika Manajemen Pendidikan)*, 6.1 (2022).
16. Sulistiyanto, E. & Chotimah, C. "Manajemen strategik berupa identifikasi SWOT dalam perencanaan pendidikan pada madrasah negeri." *Kelola: Journal of Islamic Education Management*, 8.1 (2023): 29–44.
17. Tadele, T. "SWOT analysis for educational management." *Journal of Educational Management* (2017).
18. Thompson, A. A., Strickland, A. J. & Gamble, J. E. *Crafting and Executing Strategy: The Quest for Competitive Advantage*. 18th ed., McGraw-Hill, (2010).

Source of support: Nil; **Conflict of interest:** Nil.

Cite this article as:

Piandani, D.W., Pratomo, D., Tunggal, A., Sukamti, S., Hidayat, S., Soraya, N.I., Nurlaili, N. and Khotimah, K. "Analysis of Strength, Weakness, Opportunities, and Threats in Planning to Improve the Quality of Education at SDN 003 Teluk Bayur, Berau Regency." *Sarcouncil Journal of Education and Sociology* 4.4 (2025): pp 7-14.