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The Effect of Online Service System-Based Institution Management on Learning Quality and Academic Achievement

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Abstract: The Effect of Online	Service System-Based Institutio	n Management on Learning
Quality and Academic Achieven	nent. Objectives: The purpose of	this study is to determine the
effect of the management of online	e service system -based institutions	s on the quality of the learning
process and academic achievemen	t. Methods: This research is a qua	ntitative research. The sample
used was nine junior high schools	in the city of Mataram. Data were	analyzed using path analysis.
Findings: The results show that th	e education costs of several independent	ndent variables have a positive
and significant influence between v	ariables because the value (Cr) is gro	eater than 2 and an insignificant
effect occurs between variables be	cause the value (Cr) is smaller From	n 2. The quality of the learning
process both directly and indirectly	has a positive and significant influe	ence on academic achievement
in junior high schools. Conclusion	s: The results show that the efficient	cy of the online service system-
based institution management on le	arning quality and academic achiev	rement in junior high schools in
City of Mataram have significant and	nd insignificant effects on several va	ariables.

Keywords: online service systems, institutional management, quality of the learning process, academic achievement

Abstrak: Pengaruh Manajemen Institusi Berbasis Sistem Pelayanan Online Terhadap Mutu Proses Pembelajaran dan Prestasi Akademik. Tujuan: Tujuan penelitian ini adalah untuk mengetahui pengaruh manajemen institusi berbasis sistem pelayanan online terhadap mutu proses pembelajaran dan prestasi akademik. Metode: Penelitian ini merupakan penelitian kuantitatif. Sampel pyang digunakan adalah 9 sekolah SMPN di Kota Mataram. Data dianalisis menggunakan analisis jalur. Temuan: Hasil penelitian menunjukkan bahwa biaya Pendikan dari beberapa variabel bebas memiliki pengaruh positif dan signifikan antar variabel karena nilai (Cr) lebih besar dari 2 serta pengaruh yang tidak signifikan terjadi antara variabel karena nilai (Cr) lebih kecil dari 2. Mutu proses pembelajaran baik secara langsung maupun tidak langsung memiliki pengaruh positif dan signifikan terhadap prestasi akademik pada SMP. Kesimpulan: Hasil penelitian menunjukkan bahwa efisiensi pengelolaan lembaga berbasis sistem pelayanan online terhadap mutu proses pembelajaran dan prestasi akademik di SMP se-Kota Mataram memiliki pengaruh signifikan dan tidak signifikan terhadap beberapa variabel.

Kata kunci: sistem pelayanan online, pengelolaan lembaga, mutu proses pembelajaran, prestasi akademik

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INTRODUCTION

Adherents of human capital theory argue that education is an investment in human resources that provides monetary or non-monetary benefits. Awareness of the importance of education as a golden bridge in the context of delivering the nation's welfare must be realized (Putri, et al., 2020; Vorontsova et al., 2020). A nation can be built more easily the more educated its population is. This is due to the human resources' mastery of science, technology, and skills, which makes it simpler for the government to promote national development and gives Indonesia an advantage in international competitiveness. (Avelar et al., 2019; Madani, 2019; Weybrecht, 2017). The data obtained is a comparison between countries in terms of Indonesia's state education budget which is in the lowest position, namely at the order of 108, with an index value of 0.83. Indonesia's ranking is far below other Southeast Asian countries (Shaturaev, 2021a; Unicef 2019). Based on this description, it can be concluded that the funds provided by the Government of Indonesia for education are far from what is required to carry out the Government's constitutional responsibilities to organize national education in accordance with the provisions of Article 31 (1), (2), and (5) of the Constitution. 1945 (Rahmiati et al., 2021).

One of the most significant instrumental inputs in the implementation of education in schools is the cost of education. The cost of education plays a very important and determining role in any effort to achieve educational goals that are quantitative in character (Surur, et al., 2020; Shaturaev, 2021b). Given that nearly no educational endeavor can disregard the role that money plays, it can be claimed that, notwithstanding the crises brought on by co-19, the educational process in schools will not function well without money (Iswan, et al., 2021; Kusumastuti et al., 2021). We must be ready for these changes, adapt our attitudes and behaviors, and never stop learning. All impacted nations have made an effort to implement the finest rules for ensuring the continuity of educational services (Ngwacho, 2020; Tadesse and Muluye 2020). The technological divide between schools in large cities and rural areas, the lack of teacher proficiency in using learning applications, the lack of resources for using educational technology like the internet and quotas, and the lack of established teacher-student-parent relationships in online learning are just a few of the pressing issues Indonesia is currently facing (Pokhrel and Chhetri 2021; Abidah, et al., 2020; Maimun & Bahtiar, 2022). The implementation of the physical distancing policy (maintaining physical distance) which later became the basis for carrying out learning from home, with the sudden use of information technology, often shocks educators and students, including parents and even everyone who is at home (Khusanov, et al., 2022; Rashid, and Yadav, 2020). Information technology learning has indeed been implemented in recent years in the education system in Indonesia. However, online learning that took place as a surprise from the Covid-19 pandemic, shocked almost all fronts, from districts/cities, provinces, centers and even the international world (Churiyah et al., 2020; Brammer and Clark 2020; Tarkar, 2020; Maimun & Bahtiar, 2022).

Based on the impact of the Covid-19 outbreak on the sustainability of education in Indonesia, it must really pay attention to various aspects related to the teaching and learning process so that students can produce good and outstanding students, one of which is in terms of financing (Madani, 2019; Chandasiri, 2020; Badrun et al., 2022). The development of the world in the field of education can easily be said that the problem of financing is a problem that is quite complicated for education administrators to think about. The issue of education financing will

involve issues of teaching staff, learning processes, infrastructure, marketing and other aspects related to financial matters. It is impossible to separate the financing function from other functions in school management (Kusumastuti et al., 2021; Saputra, 2018). Therefore, it can be said that financing is a central issue in the management of educational activities. The inability of an institution to provide funds or manage education costs, will hamper the teaching and learning process. Obstacles to the teaching and learning process by itself eliminate people's trust in an institution, but that does not mean that if excessive funds are available it will guarantee that school management will be better (Brunner, et al., 2020; Lafortune, et al., 2018).

The problem faced by schools is related to education funding not only from sources of education funds but also, related to the costs that must be spent on various educational activities (Lafortune, et al., 2018; Kemal and Rosyidi 2019). For example, teacher salaries, even though the average teaching staff in schools are civil servants, it cannot be denied that there are some teaching staff who are still temporary staff, so the school must provide funds for honorary teacher salaries. If the costs received by teaching staff do not improve in terms of numbers, this can threaten and discourage prospective teaching staff throughout Indonesia (Xuehui, 2018; Katete and Nyangarika, 2020). In addition, buildings that are large and categorized as luxurious must also be maintained to maintain their beauty, the school must pay security officers and cleaning staff more than one person each month. The amount of costs that must be managed by the school is also related to facilities and infrastructure. the school must spend more funds to replace it with a new facility (Hervie and Winful 2018; Tokan and Imaculata, 2019; Surur, et al., 2020). These costs have not been for activities outside of learning such as extracurricular activities and school anniversary or other events so that schools need an onlinebased service system to facilitate the management of institutions related to educational costs so as to improve the quality of the teaching and learning process and academic achievement (Kapur, 2018; Puspitarini and Hanif, 2019).

In general, schools, especially those in remote areas, really need and lack adequate learning facilities during Covid-19 due to minimal understanding of technology and the huge costs required to facilitate the teaching and learning process. Meanwhile, on the other hand, the government, in this case the education office, is powerless with many requests for additions or improvements to existing learning facilities, given the limited budget available (Gore, et al., 2021; Gazmararian, et al., 2021). With the fact that the existing learning facilities are as above while the existing school system is required to produce graduates who excel (of good quality) and can continue to a higher school level (Ramli, et al., 2018). While implementers in the field, in this case educators, must try to find various alternatives as solutions. Many schools have succeeded in overcoming this problem, but not a few schools have failed because their teaching staff were unable to overcome the constraints of these learning facilities. It is also possible that the attention of the surrounding community is lacking or even does not care about these conditions (Puspitarini and Hanif, 2019; Batubara, 2021).

According to Shaturaev (2021b), The effectiveness of education can be judged, among other things, by how effectively pupils are taught and how well they learn. When student learning results advance and get better, educational objectives are said to be met. The outcomes of students' learning efforts are what are meant by learning outcomes. Educational facilities comprise all equipment—both portable and permanent necessary for the teaching and learning process to proceed smoothly, regularly, effectively, and efficiently so that students can attain their full potential as learners. Education finance, according to Marchand and Weber (2020), is a necessary component of its existence in order to provide educational input components. Since education is a process, good input will lead to good teaching and learning, which will improve learning outcomes.

Along those lines, it is stated in (Surur, et al., 2020) that the price of education is a crucial input factor in the implementation of education. Education costs are necessary to carry out school activities (both inside and outside of the classroom) and to transform schools into highquality educational institutions. Based on the description above, it can be seen that the use of educational costs such as salary, welfare, costs for increasing teaching and learning process activities, costs for professional development, maintenance costs, replacement of infrastructure, costs for increasing extracurricular development, school household costs, coaching costs, monitoring, supervision, and reporting must be carried out by managing an online-based service system to facilitate the management of educational costs so that they are channeled on target and have a positive influence on the quality of the teaching and learning process and academic achievement, so researchers are interested in conducting research on the effect of the efficiency of managing sipeni-based institutions (online service systems) on process quality teaching and learning and learning achievement in junior high schools in the city of Mataram.

METHODS

Types of Research

This research is a quantitative research with a positivist approach. This approach is used to explain how the role of government and community expenditure to fulfill school resources (salary/student (X1), Welfare/Student (X2), Costs for Increasing Teaching and Learning Process Activities (X3), Profitional/Student Development Costs (X4), Maintenance costs, replacement of infrastructure/students (X5), the cost of increasing extracurricular/student development (X6), school/student household fees (X7), supervisory fees, monitoring, supervision, reporting/student (X8)) on the quality of the process teaching and learning and academic achievement.

Location and Sample of Research

The location of this study was conducted in nine (9) SMPN in Mataram City, namely SMPN 1 Mataram, SMPN 2 Mataram, SMPN 5 Mataram, SMPN 6 Mataram, SMPN 8 Mataram, SMPN 14 Mataram, SMPN 18 Mataram, SMPN 19 Mataram, and SMPN 21 Mataram. The selection of locations in SMPN in the city of Mataram, because of the characteristics of the city of Mataram as the capital of the provincial and tourist destinations gain the effects of the era of globalization which tends to be liberal and materialistic, so that the competition is tight and the cost of living is relatively more expensive than other cities in Pulai Lombok. To be able to compete and meet the cost of living, as citizens are required to always improve the quality of their profession in order to be able to improve their performance so that they can improve their income. The number of students in each school sample used is presented in the following picture.

Data Collection Methods and Techniques

The data collection method used in this study is the Nazir Census Method (1988), namely the collection of data carried out on all objects used as an analysis unit, namely all State High Schools in the City of Mataram. Data collection techniques in this study use observations, interviews, documentation, and library studies. The data used is data from 2019 to 2022.



Figure 1. Total of student in junior high school

Data Analysis Technique

Data obtained before the hypothesis test was carried out testing the analysis prerequisites, the prerequisite testing of the analysis used was the normality test, outliers, and multicollinearity test (Kabir et al., 2020; Wachuka, 2021). The hypothesis test in this study uses the path analysis model. According to mitchell, (2020) path analysis can be used to calculate the total, direct and indirect effects for each endogenous construct. Path analysis is used to determine the direct or indirect influence of exogenous variables on endogenous variables.

The hypothesis test is carried out by testing each path coefficient. If $p < \dot{a}$, then Ho is rejected and vice versa if $p > \dot{a}$, then Ho is accepted. The analysis or significance of the path coefficients is analyzed through the significance of the regression weights. If the results of calculations with this model obtained a value of t (CR) greater than 2 or a significance value of p d" 0.05, then the influence of one variable on another is significant. This test also shows the magnitude of the overall influence, direct influence and indirect influence of one variable on another (Setiyani et al., 2019; Wahyudi et al., 2020). The path analysis model used in this study is presented in Table 1 below.

RESULTS AND DISCUSSION Description of Research Data

This study aims to determine the influence of the online service system-based institution management on the quality of learning process and academic achievement. This research was conducted in nine junior high schools in the city of Mataram. Management of educational institutions can be interpreted as a series of activities to plan, organize, motivate, control, and develop all efforts in regulating and utilizing human resources, facilities and infrastructure to achieve educational goals effectively, efficiently, and productively. Education as a right factor that must be managed properly, in order to improve all students' potential and become qualified human resources for a nation. In the following, research data are present related to online service systembased institutional management variables.



Figure 2. Data on the management of junior high school educational institutions in the city of mataram

Figure 2 above shows that salary (X1), people's welfare (X2), the cost of improving the learning process (X3), the cost of professional development (X4), the cost of maintenance and replacement of facilities and infrastructure (X5), the cost of increasing extrite (X6) development (X6), School Household Costs (X7), as well as the cost of guidance, monitoring, supervisory, and reporting (X8) each school is different and each year is different. In the salary variable (X1), the Middle School (SMPN 2 Mataram) is higher than other schools each year, which is an average of Rp. 2,416.28. The high salary at SMPN 2 Mataram is proportional to the performance of teachers at the school. The salary paid to the teacher can determine its performance in the quality of the learning process and achievement. Salary can improve teacher performance in carrying out his duties to become an educator with a sense of enthusiasm that is owned when teaching (Suryana, 2020)

Based on Figure 2 above, it is also seen that the indicator of the people's welfare (X2) is more dominated by SMPN 1 Mataram in 2020/ 2021 compared to other schools in 2019 to 2022. Teacher welfare is the provision of prosperity of life to teachers who work in the school environment, both in the form material and spiritual so that a life is fulfilled and better as a return or repayment from the responsibilities it bears. Welfare is important for all teachers. The importance of teacher welfare is to increase motivation and morale, increase the attitude of teacher loyalty towards schools (Togatorop, 2017).

In addition to salary indicators and people's welfare, there is also a cost of increasing the learning process (X3), Professional Development Costs (X4), Costs for Maintenance and Replacement of Facilities and Infrastructure (X5), Costs for Increasing Extarkuricular Development (X6), School Household Costs (X7), as well as the cost of guidance, monitoring, supervision, and reporting (X8). In each of these variables, SMPN 2 Mataram is more dominant than other schools every year, namely 2019/2022. In the efforts of every achievement of educational goals both quantitative and qualitative, education costs have a very decisive role. Therefore, education without adequate cost support, the education process in schools will not run in accordance with expectations (Mesiono et al., 2021).

The cost of education is one of the very important components of input in the administration of education. Education costs are needed to facilitate the implementation of school program policies, the implementation of school activities (intra and extra), and can develop schools as quality educational institutions. Education costs are also needed to facilitate the implementation of school policies and programs, the implementation of school activities both intra and extra and can develop schools as quality educational institutions (Hanum et al., 2020).

Statistical Analysis Result Data

Before the research data were analyzed using a hypothesis test, first a prerequisite analysis

test was carried out. Prerequisite test analysis is carried out as a basic concept to determine the required test statistics, whether the test uses parametric or non-parametric statistics. The data from the statistical analysis presented is the data from the normality evaluation analysis. The following shows the results of the normality evaluation.

Data from the normality test results are presented in table 2. It can be seen regarding the minimum and maximum values, skewness (skew), kurtosis and criticality values (CR) owned by each variable. The skewness values of all research variables are positive, meaning that all the frequency values are to the left of the peak of the normal distribution. The kurtosis values of all

Table 1. Normality test results

Variable	min	Max	Skew	c.r.	kurtosis	c.r.
X8	7747.930000	285748.300000	2.133217	4.525236	3.560863	3.776865
X7	34593.500000	446802.720000	1.739937	3.690965	1.856076	1.968666
X6	15644.770000	256870.750000	2.141700	4.543233	3.296053	3.495992
X5	15201.790000	1224897.960000	2.473965	5.248073	4.888178	5.184696
X4	8227.480000	260632.650000	2.638336	5.596757	6.231916	6.609945
X3	56574.070000	433129.250000	1.512399	3.208282	1.525227	1.617748
X2	5798.140000	967280.990000	1.987159	4.215402	2.243470	2.379559
X1	1368258.910000	4936278.470000	1.210101	2.567012	.979823	1.039260
Y1	85.000000	98.800000	.488853	1.037014	-1.465973	1.554899
Y2	60.000000	88.800000	582255	1.235150	560988	595018
Multivariate					24.454702	4.101178

research variables have positive and negative signs, meaning that all frequency values form a normal distribution curve. The data used in this study for the variables X1, Y1 and Y2 have a normal data distribution, because the critical ratio data value is less than ± 2.58 at a significance level of 0.01 (Baistaman et al., 2020). Therefore, the assumption of normality of the data has been fulfilled, while for the variables X2, X3, X4, X5, X6, X7, X8 the data distribution is not normal, because the critical ratio value of the data is more than ± 2.58 at a significance level of 0.01 so that the assumption of normality of the data is not fulfilled. In addition to presenting normality data, data from the results of outlier evaluation analysis are also presented. The following is the result of the outlier evaluation.

In this analysis, outliers can be evaluated by means of analysis of multivariate outliers. those categorized as multivariate research outliers are the Mahalanobis Distance values that are greater than X2 (10; 0.01) = 23,209 (Neira-Rodado et al., 2020). Based on the results of the multivariate outlier test in table 3, it can be explained that from the 27 observation data, there is one observation data that experiences outliers, namely observation data 2, because the value of the mahalanobis distance is greater than X2 (10; 0.01) = 23,209

Observati on number	Mahalano bis d- squared	р1	p2	Observati on number	Mahalano bis d- squared	р1	p2
2	24.126828	.007271	.178832	15	7.645487	.663421	.961041
6	21.242578	.019464	.096569	8	7.276197	.699138	.963237
21	19.134642	.038585	.084478	24	7.109939	.715027	.943627
4	18.810368	.042738	.026674	16	6.451156	.776043	.974953
5	17.036782	.073554	.044567	27	6.450434	.776108	.939094
3	15.787418	.105882	.059394	17	6.106605	.806229	.937809
19	14.927391	.134732	.061936	7	5.922654	.821719	.906586
25	12.892304	.229756	.267861	20	5.516589	.854113	.912330
12	11.783512	.299807	.421798	23	4.936704	.895366	.943376
11	11.073506	.351820	.491780	13	4.005715	.947089	.987399
9	10.968753	.359958	.370925	14	3.610508	.963212	.983665
1	9.515214	.484002	.726157	26	3.536939	.965829	.936577
10	9.379409	.496514	.635809	22	3.233689	.975377	.857794
18	1.518676	.998876	.970091				

Table 2. Data on outliers multivariate test results

and the remaining 26 observations no outliers occur, because the value of the mahalanobis distance is not greater than X2 (10; 0.01) = 23,209.

The occurrence of multicollinearity in a combination of variables can be observed through the determinants of the sample covariance matrix. A determinant that is really small or close to zero indicates multicollinearity. The results of the analysis show that the determinant value of the sample covariance matrix is 2057649. The determinant value of the sample covariance matrix is very large, so there is no multicollinearity in the data being analyzed (Terziev et al., 2021).

Hypothesis Test Result Data

Before testing the hypothesis, first do the Goodness of Fit model test. This test is carried out using visible statistical indicators. The results obtained show that the model being analyzed still has an insignificant path. The next step is to analyze the significance of the path coefficient through the significance of the Regression Weights (Safitri, 2018). Based on the results of the analysis, it can be seen in Table 4 that there is a positive and significant influence between the variables because the value (CR) is greater than 2 or p d" 0.05. Meanwhile, an insignificant effect occurs between variables because the value (CR) is less than 2 or p > 0.05, so there is no path these variables.

No	Hypothesis Formulation	Test results	CR Value	Value Coefficient
H1	X1 has a positive and significant effect on Y1	Proven	2.925	$0.504 \rightarrow S$
H2	X2 has a positive and significant effect on Y1	Proven	2.294	$0.417 \rightarrow S$
Н3	X3 has a positive and insignificant effect on Y1	Not proven	0.115	$0.037 \rightarrow TS$
H4	X4 has a negative and insignificant effect on Y1	Not proven	-0.646	$-0.380 \rightarrow TS$
H5	X5 has a positive and insignificant effect on Y1	Not proven	0.626	$0.257 \rightarrow TS$
H6	X6 has a positive and insignificant effect on Y1	Not proven	0.126	$0.426 \rightarrow TS$
H7	X7 has a negative and insignificant effect on Y1	No Proven	-0.907	$-0.175 \rightarrow TS$
H8	X8 has a positive and not significant effect on Y1	Not proven	0.490	$0.188 \rightarrow TS$
Н9	X1 has a positive and significant effect on Y2	Proven	2.348	$0.148 \rightarrow S$
H10	X2 has a positive and significant effect on Y2	Proven	2.599	$0.164 \rightarrow S$
H11	X3 has a positive and significant effect on Y2	Proven	2.667	$0.275 \rightarrow S$
H12	X4 has a negative and insignificant effect on Y2	Not proven	-0.886	-0.167→ T
H13	X5 has a positive and significant effect on Y2	Proven	3.025	$0.398 \rightarrow S$
H14	X6 has a negative and significant effect on Y2	Proven	-5.169	$-0.555 \rightarrow S$
H15	X7 has a negative and significant effect on Y2	Not proven	-2.532	$0.037 \rightarrow S$

Table 3. Research hypothesis test results

H16	X8 has an effect positively and not significantly to Y2	Not proven	0.305	$-0158 \rightarrow TS$
H17	Y1 has a positive and significant effect on Y2	Proven	5.257	$0.327 \rightarrow S$
	Total 1			1.743
H18	X1 indirectly through Y1 has a positive effect on Y2	Proven	0.165	$0.164 \rightarrow \text{positive}$
H19	X2 indirectly through Y1 has a positive effect on Y2	Proven	0.136	$0.136 \rightarrow \text{positive}$
H20	X3directly through Y1 has a positive effect on Y2	proven	0.012	$0.012 \rightarrow \text{positive}$
H21	X4 indirectly through Y1 has a negative effect on Y2	proven	-0.124	$-0.124 \rightarrow \text{negative}$
H22	X5 indirectly through Y1 has a positive effect on Y2	proven	0.084	$0.084 \rightarrow \text{positive}$
H23	X6 indirectly through Y1 has a positive effect on Y2	proven	0.013	$0.013 \rightarrow \text{positive}$
H24	X7 separately indirectly through Y1 it has a negative	proven	-0.057	$-0.057 \rightarrow negative$
	effect on Y2	^		_
H25	X8 indirectly through Y1 it has a positive effect on Y2	proven	0.061	$0.061 \rightarrow \text{positive}$
	Total 2			0.289
	Total $1+2$			2.032
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Based on the results of the analysis of hypothesis testing it shows that (Salary/student (X1) has a significant effect on the quality of the learning process (Y1) and academic achievement (Y2). The results of this study indicate that the higher the teacher's salary, the better the quality the quality of the learning process and academic achievement. The results of this study are in line with research conducted by Wajdi & Perkasa (2020); Nasrun, et al (2022) which states that the salary variable has a significant and significant effect on teacher performance. This statement is also in line with research by Purwati & Kurniawan (2018) which states that teacher salaries have a significant influence on teacher performance. Therefore it is important for schools to increase teacher salaries.

In the Welfare/student variable (X2) it can be seen that people's welfare has a significant and positive effect on the quality of learning (Y1) and academic achievement (Y2). The results of this study indicate that the greater the people's welfare, the better the quality of the learning process and academic achievement. Research conducted by Massalim (2019) also shows that the welfare of Early Childhood Education teachers in the form of certification affects a teacher's performance. Variables Cost of increasing process activities teaching and learning/student (X3), Maintenance costs, replacement of infrastructure/student facilities (X5), Cost of increasing extracurricular/student coaching (X6), School/student household expenses (X7), Cost coaching, monitoring, supervising, reporting/ students (X8) also shows that it has a positive and insignificant effect on the quality of the learning process (Y1), but has a positive and significant effect on academic achievement (Y2). The results of this study indicate that the greater the cost of increasing process activities teaching and learning, maintenance costs, replacement of infrastructure/student facilities, increasing extracurricular/student coaching costs, school/ student household expenses, and cost of coaching, monitoring, supervising, reporting/ students, the better the quality of the learning process and academic achievement. The results of this study are in line with research conducted by Suhirman (2018) which states that education costs affect the teaching and learning process acceptable, with an R Square value of 0.262 or 26.2%. This shows that 26.2% of the variable educational costs affect the teaching and learning process. However, the results of this study are in contrast to research conducted by Ramadhani & Kardoyo (2019) which concluded that educational costs do not affect the quality of the process at public high schools in Magelang City, Magelang and Purworejo Regencies.

The table above also shows that Salary/ student (X1), Welfare/student (X2), cost of increasing process activities teaching and learning/ student (X3), maintenance costs, replacement of infrastructure/student facilities (X5), cost of increasing extracurricular/student coaching (X6), as well as reporting/students (X8) indirectly through the quality of the learning process have a positive influence on academic achievement. This indicates that the variables without involving the learning process in the calculations have a significant and positive influence on academic achievement. Meanwhile, the variable costs for professional/student coaching (X4) and school/ student household expenses (X7) indirectly have a negative effect on academic achievement. This indicates that to improve good academic achievement, attention must be paid to the quality of the learning process in terms of professional development and school household expenses.

Educators (teachers) have a very important role in the success of education because they are directly in contact with students. The teacher is a figure who is used as a role model and even used as a self-identification figure for his students. In addition, teacher motivation in carrying out their duties as educators will have an impact on students' ability to achieve good learning achievement (Geiger and Pivovarova, 2018). Thus, teachers are required to have good competence in carrying out learning activities at school. Teachers as individuals must always strive to meet demands in increasing their capabilities and skills in various fields of knowledge, especially those related to learning and educational activities. In addition, educational facilities and facilities and infrastructure in supporting the teaching and learning process are needed to improve the quality of the teaching and learning process and academic achievement (Changwong, et al., 2018; Bal-Taºtan et al., 2018).

Factors that influence this are education costs such as salary, welfare, costs of increasing teaching and learning process activities, costs of professional development, maintenance costs, replacement of infrastructure, costs of increasing extracurricular coaching, school household costs, coaching costs, monitoring, supervision, and reporting. This is as stated by Lafortune et al., (2018) that educational costs can have an effect on academic achievement. The results of this study have strengthened previous research that the cost of education is a variable that can have an impact on student learning outcomes. This indicates that education costs need to be managed according to predetermined procedures using an online-based service system so that they can be organized in such a way. That way, education costs can be used to support the learning process which can lead to an increase in the quality of learning which is reflected in the increase in student learning outcomes.

CONCLUSIONS

Based on the research and data obtained, it can be included that salary and welfare have a positive and significant effect while cost of increased process activities teaching and learning/ student, maintenance cost, replacement of infrastructure/student facilitations, and cost of increased extracurric /Student Coaching has an insignificant effect and Profitional Development Costs/Students and School Household Expenses have a negative and not significant effect on the teaching and learning process. Salary variable; welfare of the people; Cost of Increasing Process Activities Teaching and Learning/Student; and maintenance costs, replacement of infrastructure/ student facilities have a positive and significant effect while cost of increased extracurricular/ student coaching; and school/student household expenses have a negative and significant effect then x8 has an insignificant effect and x4 has a negative and not significant effect on academic achievement. The Quality of the Teaching and Learning Process, Both Directly and Indirectly, has a positive and significant impact on academic achievement in junior high schools.

The results of this study can be a school reference in paying attention to the management

of online system -based institutions in the quality of the quality of the learning process and academic achievement. With good management of institutions, there is an improvement in the quality of the learning process and academic achievement, so as to produce quality institutions. However, the results of this study are still limited to public schools without involving private schools in the city of Mataram as a comparison in knowing the effect of management so much on the quality of the learning process and academic achievement.

REFERENCES

- Abidah, A., Hidaayatullaah, H. N., Simamora, R. M., Fehabutar, D., & Mutakinati, L. (2020). The impact of covid-19 to indonesian education and its relation to the philosophy of "merdeka belajar". *Studies in Philosophy of Science and Education*, 1(1), 38-49.
- Avelar, A. B. A., da Silva-Oliveira, K. D., & da Silva Pereira, R. (2019). Education for advancing the implementation of the Sustainable Development Goals: A systematic approach. *The international journal of management education*, 17(3), 100322.
- Badrun, B., Bahtiar, B., & Maimun, M. (2022). the effect of self-efficacy on teachers' organizational citizenship behavior: a case of mtsn 1 mataram city. *Jurnal Pendidikan Progresif*, *12*(3), 1356-1371.
- Baistaman, J., Awang, Z., Afthanorhan, A., & Rahim, M. Z. A. (2020). Developing and validating the measurement model for financial literacy construct using confirmatory factor analysis. *Humanities* and Social Science Review, 8(2), 413-422.
- Bal-Ta^otan, S., Davoudi, S. M. M., Masalimova, A. R., Bersanov, A. S., Kurbanov, R. A.,

Boiarchuk, A. V., & Pavlushin, A. A. (2018). The impacts of teacher's efficacy and motivation on student's academic achievement in science education among secondary and high school students. *EURASIA Journal of Mathematics, Science and Technology Education, 14*(6), 2353-2366.

- Batubara, B. M. (2021). The problems of the world of education in the middle of the covid-19 pandemic. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4(1), 450-457.
- Brammer, S., & Clark, T. (2020). COVID 19 and management education: Reflections on challenges, opportunities, and potential futures. *British journal of Management*, 31(3), 453.
- Brunner, E., Hyman, J., & Ju, A. (2020). School finance reforms, teachers' unions, and the allocation of school resources. *Review of Economics and Statistics*, 102(3), 473-489.
- Chandasiri, O. (2020). The COVID-19: impact on education. Journal of Asian and African Social Science and Humanities, 6(2), 38-42.
- Changwong, K., Sukkamart, A., & Sisan, B. (2018). Critical thinking skill development: Analysis of a new learning management model for Thai high schools. *Journal of International Studies*, *11*(2).Rahmiati, R., Firman, F., & Ahmad, R. (2021). Implementasi Pendidikan sebagai Hak Asasi Manusia. *Jurnal Pendidikan Tambusai*, *5*(3), 10160-10165.
- Churiyah, M., Sholikhan, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia education readiness conducting distance learning in Covid-19 pandemic situation. *International Journal of Multicultural and Multireligious*

Understanding, 7(6), 491-507.

- Gazmararian, J., Weingart, R., Campbell, K., Cronin, T., & Ashta, J. (2021). Impact of COVID 19 pandemic on the mental health of students from 2 semi rural high schools in Georgia. *Journal of School Health*, 91(5), 356-369.
- Geiger, T., & Pivovarova, M. (2018). The effects of working conditions on teacher retention. *Teachers and Teaching*, 24(6), 604-625.
- Gore, J., Fray, L., Miller, A., Harris, J., & Taggart,
 W. (2021). the impact of covid-19 on student learning in new south wales primary schools: an empirical study. *The Australian Educational Researcher*, 48(4), 605-637.
- Hanum, N. A., Supriyanto, A., & Timan, A. (2020). Pengembangan kualitas guru: upaya kepala sekolah dalam meningkatkan mutu sekolah dasar. Sekolah Dasar: Kajian Teori Dan Praktik Pendidikan, 29(1), 38-50.
- Hervie, D. M., & Winful, E. C. (2018). Enhancing teachers' performance through training and development in Ghana education service (a case study of ebenezer senior high school). Journal of Human Resource Management, 6(1), 1-8.
- Iswan, A. S., Priharta, A., Bahar, H., & Miyati, E. (2021). The Influence of School-Based Management Implementation on the Improvement of Education Quality in Primary Schools. *Journal of Hunan University Natural Sciences*, 48(4).
- Kabir, I., Gunu, U., & Gwadabe, Z. L. (2020). Preliminary analysis on the effect of decent work environment on work life balance in Nigerian SMEs. Asian Journal of Research in Education and Social Sciences, 2(2), 125-140.
- Kapur, R. (2018). Factors influencing the students academic performance in

secondary schools in India. *University Of Delhi*, 575-587.

- Katete, S., & Nyangarika, A. (2020). Effects of late and non-payment of teachers' salaries and benefits on learning process in public secondary schools. *Internation Journal Of Advance Research And Innovative Ideas In Education*, 6(4), 1274-1290.
- Khusanov, K., Khusanova, G., & Khusanova, M. (2022). Compulsory distance learning in uzbekistan during the covid-19 era: the case of public and senior secondary vocational education systems. In Socioeconomic Inclusion During an Era of Online Education (pp. 111-133). IGI Global.
- Kusumastuti, R., Matin, M., & Rochanah, S. (2021). The influence of planning, reporting, standard operating procedure on university education costs management accountability. *AL-ISHLAH: Jurnal Pendidikan*, *13*(2), 927-933.
- Lafortune, J., Rothstein, J., & Schanzenbach, D. W. (2018). School finance reform and the distribution of student achievement. *American Economic Journal: Applied Economics*, 10(2), 1-26.
- Madani, R. A. (2019). Analysis of Educational Quality, a Goal of Education for All Policy. *Higher Education Studies*, 9(1), 100-109.
- Maimun, M., & Bahtiar, B. (2022). The Effect of Search, Solve, Create, And Share (SSCS) Learning Models Assisted Multimedia Interactive to Improve Creative Thinking Ability and Student Learning Outcomes. Jurnal Penelitian Pendidikan IPA, 8(4), 1834-1840.
- Maimun, M., & Bahtiar, B. (2022). Kindergarten teachers' perceptions of online learning during the covid-19 pandemic in mataram city. *AL-ISHLAH: Jurnal*

Pendidikan, 14(4), 6137-6146.

- Marchand, J., & Weber, J. G. (2020). How local economic conditions affect school finances, teacher quality, and student achievement: evidence from the Texas shale boom. *Journal of Policy Analysis and Management*, 39(1), 36-63.
- Massalim, S. Z. (2019). Pengaruh kesejahteraan guru terhadap kinerja guru PAUD di Kp. Cibadak Kayumanis Bogor. Jurnal Pendidikan Luar Sekolah, 13(2), 62-67.
- Mesiono, M., Suswanto, S., Lubis, R. R., & Haidir, H. (2021). Manajemen pembiayaan pendidikan dalam meningkatkan mutu pendidikan di madrasah aliyah imam muslim serdang bedagai. Intiqad: Jurnal Agama dan Pendidikan Islam, 13(1), 119-134.
- Mitchell, R. J. (2020). Path analysis: pollination. In *Design and analysis of ecological experiments* (pp. 211-231). Chapman and Hall/CRC.
- Nasrun, M., Basri, B., & Jam'an, A. (2022). Pengaruh suasana lingkungan kerja dan gaji terhadap kinerja guru dalam pembelajaran ips di sd negeri sekecamatan bontomarannu kabupaten gowa. Al-Madrasah: Jurnal Pendidikan Madrasah Ibtidaiyah, 6(4), 1459-1471.
- Neira-Rodado, D., Nugent, C., Cleland, I., Velasquez, J., & Viloria, A. (2020). Evaluating the impact of a two-stage multivariate data cleansing approach to improve to the performance of machine learning classifiers: a case study in human activity recognition. *Sensors*, 20(7), 1858.
- Ngwacho, A. G. (2020). COVID-19 pandemic impact on Kenyan education sector: Learner challenges and mitigations. Journal of Research Innovation and Implications in Education, 4(2), 128-139.

- Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133-141.
- Purwati, A. A., & Kurniawan, J. (2018). Analisis pengaruh gaji, kedisiplinan dan pembagian kerja terhadap kinerja guru dan karyawan di sekolah esa sejahtera pekanbaru. Jurnal Cano Ekonomos, 7(1), 16-24.
- Puspitarini, Y. D., & Hanif, M. (2019). Using learning media to increase learning motivation in elementary school. *Anatolian Journal of Education*, 4(2), 53-60.
- Putri, R. S., Purwanto, A., Pramono, R., Asbari, M., Wijayanti, L. M., & Hyun, C. C. (2020). Impact of the COVID-19 pandemic on online home learning: An explorative study of primary schools in Indonesia. *International Journal of Advanced Science and Technology*, 29(5), 4809-4818.
- Rahmiati, R., Firman, F., & Ahmad, R. (2021). Implementasi pendidikan sebagai hak asasi manusia. *Jurnal Pendidikan Tambusai*, 5(3), 10160-10165.
- Ramadhani, N. S., & Kardoyo, K. (2019). Kepemimpinan kepala sekolah, biaya pendidikan, komite sekolah, perilaku organisasi terhadap mutu lulusan melalui mutu proses. Economic Education Analysis Journal, 8(2), 713-730.
- Ramli, N., Muljono, P., & Afendi, F. M. (2018). External factors, internal factors and selfdirected learning readiness. *Journal of Education and e-Learning Research*, 5(1), 37-42.
- Rashid, S., & Yadav, S. S. (2020). Impact of Covid-19 pandemic on higher education and research. *Indian Journal of Human Development*, 14(2), 340-343.

- Safitri, D. D. (2018). Managing school based on character building in the context of religious school culture (Case in Indonesia). *Journal of Social Studies Education Research*, 9(4), 274-294.
- Saputra, A. (2018). Allocation of education budget in indonesia. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 1(2), 141-147.
- Setiyani, R., & Solichatun, I. (2019). Financial well-being of college students: An empirical study on mediation effect of financial behavior. *KnE Social Sciences*, 451-474.
- Shaturaev, J. (2021a). A Comparative analysis of public education system of indonesia and uzbekistan. *Bioscience Biotechnology Research Communications*, 14(5), 89-92.
- Shaturaev, J. (2021b). Financing and management of islamic (madrasah) education in indonesia. Zeszyty Naukowe Politechniki Czêstochowskiej Zarz¹dzanie, 42(1), 57-65.
- Surur, M., Wibawa, R. P., Jaya, F., Suparto, A. A., Harefa, D., Faidi, A., ... & Purwanto, A. (2020). Effect of education operational cost on the education quality with the school productivity as moderating variable. *Psychology* And Education, 57(9), 1196-1205.
- Suryana, S. (2020). Permasalahan mutu pendidikan dalam perspektif p e m b a n g u n a n pendidikan. Edukasi, 14(1).
- Tadesse, S., & Muluye, W. (2020). The impact of COVID-19 pandemic on education system in developing countries: a review. Open Journal of Social Sciences, 8(10), 159-170.
- Tarkar, P. (2020). Impact of COVID-19 pandemic on education

system. International Journal of Advanced Science and Technology, 29(9), 3812-3814.

- Terziev, V., Zahariev, A., Pavlov, T., Petkov, K., & Kostov, D. (2021). The effect of exogenous variables on P/E determinants in the context of expected post Covid-19 crisis recovery-the case of Balkan capital markets. In 66th International Scientific Conference on Economic and Social Development–Rabat (pp. 26-27).
- Togatorop, M. (2017). Pengaruh biaya pendidikan terhadap mutu sekolah SMA swasta. SCHOLARIA: jurnal Pendidikan dan Kebudayaan, 7(3), 234-240.
- Tokan, M. K., & Imakulata, M. M. (2019). The effect of motivation and learning behaviour on student achievement. *South African Journal of Education*, *39*(1).
- Unicef. (2019). An unfair start: Inequality in children's education in rich countries. United Nations.
- Vorontsova, A. S., Vasylieva, T. A., Bilan, Y. V., Osrasz, G., & Mayboroda, T. (2020). The influence of state regulation of education for achieving the sustainable development goals: case study of Central and Eastern European countries.
- Wachuka, W. S. (2021). Factors promoting job satisfaction among teachers in rural secondary schools in murang'a south district, Kenya. Journal of Education, 4(4).
- Wajdi, F., & Perkasa, D. H. (2020). Pengaruh gaji guru dan motivasi kerja terhadap kinerja guru pada sdit almuddatsiriyah. Kalbisiana Jurnal Sains, Bisnis dan Teknologi, 8(4), 3950-3963.
- Wahyudi, S., Hasanudin, H., & Pangestutia, I. (2020). Asset allocation and strategies on investment portfolio performance: A study

on the implementation of employee pension fund in Indonesia. Accounting, 6(5), 839-850.

- Weybrecht, G. (2017). From challenge to opportunity-Management education's crucial role in sustainability and the Sustainable Development Goals-An overview and framework. *The International Journal of Management Education*, 15(2), 84-92.
- Xuehui, A. (2018). Teacher salaries and the shortage of high-quality teachers in China's rural primary and secondary schools. *Chinese Education & Society*, *51*(2), 103-116.