

Does the single tuition fee affect students' academic performance? Evidence from Indonesia

Arina Hasbana^{1*}  <https://orcid.org/0009-0009-7286-6990>

Evayani Fadhilah²  <https://orcid.org/0009-0002-2161-2500>

¹Staff of Financial Planning, UIN Raden Mas Said Surakarta, Indonesia

²Staff of Financial Management Analyst, UIN Raden Mas Said Surakarta, Indonesia

ABSTRACT

The rise in tuition fees has become a prominent issue in Indonesian education, especially as of 2024. It is still a concern whether the increase in UKT has a relationship with student achievement. This study aimed to determine the differences in student academic achievement based on the single tuition fee (UKT) category and the impact of UKT on student academic achievement. The sample in the study comprised 3643 samples of data on single tuition fees and student cumulative grade point averages from 2021 to 2023. Employing one sample test, ANOVA test, and linear regression analysis, the results showed that students across all UKT categories, from UKT 1 to UKT 6, surpassed the quality target standard GPA of 3.60 at UIN Raden Mas Said Surakarta. Second, the average GPA varied significantly across each category, indicating differing academic achievements among the UKT categories. Third, the UKT categories ranked from the highest to lowest score value are UKT Category 6, UKT Category 2, UKT Category 3, UKT Category 1, UKT Category 4, and UKT Category 5. Fourth, the study reveals that UKT does not impact the academic performance of students at UIN Raden Mas Said Surakarta, suggesting that other external factors not included in the study variables influence student academic achievement. Thus, increasing or decreasing UKT does not affect students' academic achievement; instead, other external factors play a significant role in this.

This is an open-access article under the [CC-BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license.



ARTICLE INFO

Keywords:

Academic Performance;
Grade Point Average (GPA);
Single Tuition Fee

Article History:

Received: 01 June 2024

Revised: 03 July 2024

Accepted: 09 July 2024

Published: 13 July 2024


How to Cite in APA Style:

Hasbana, A. & Fadhilah, E. (2024). Does the single tuition fee affect students' academic performance? Evidence from Indonesia. *Journal of Educational Management and Instruction*, 4(1), 83-100.

Introduction

Single Tuition Fee (UKT) is a portion of tuition fees borne by each student in each Study Program for diploma programs and undergraduate programs based on their economic ability (Permenag) No. 96 year 2013. This is borne by students according to their economic abilities. According to the Regulation of the Minister of Education and Culture (Permendikbud) No. 55 year 2013, UKT is intended to ease the burden on students towards education financing (Kemendikbud, 2013). In accordance with the constitutional mandate of Permendikbud No. 55 of 2013, the UKT policy was given to state educational institutions by calculating funds in accordance with the economic conditions of students. The UKT nominal is determined based on the UKT minus the costs borne by the

* Corresponding author: Arina Hasbana  arina.hasbana@staff.uinsaid.ac.id

 <https://doi.org/10.22515/jemin.v4i1.9154>

government. This policy aims to alleviate the financial burden on students from their first semester to graduation, ensuring that operational requirements for lecture activities in public universities are legally regulated.

The UKT rates at State Islamic Religious Universities (PTKIN) are tiered and divided into several categories. This cross-subsidization was carried out between students with high and low economic abilities. Thus, students with low economic conditions get a low UKT nominal, and vice versa; students with high economic abilities get a high UKT nominal. UIN Raden Mas Said Surakarta has implemented the UKT system since 2015. Initially without a category, then in 2016, it was divided into Category I-IV. In 2017, it was changed to five categories, including Bidikmisi (students with low-income backgrounds). In 2018, categories were added for international students, international classes, cooperation, and independent students. By 2022, there will be seven UKT categories and one Kartu Indonesia Pintar/KIP college scholarship. During the selection process for UKT recipients, candidates are categorized into seven groups based on fee amounts, with consideration given to factors such as family background, parental education, and occupation, income, and assets. The implementation of the UKT system for the 2022-2023 academic year is carried out in accordance with the Decree of the Minister of Religious Affairs Number 244 concerning Single Tuition Fees at State Universities of Diversity in the Ministry of Religious Affairs. The UKT system applies to new students in 2022 through three channels: the National Academic Achievement Selection (SPAN), Entrance Examination, and Mandiri (independent) entrance selection.

Tuition fee exemptions and educational subsidies are significant tools for improving children's educational attainment in developing countries (Khien et al., 2023). The relationship between UKT and students' academic achievement is in the spotlight of researchers. Octaviana (2020) states that academic achievement is a value or measure obtained by a person in an educational institution according to certain standards or criteria and is a function of in-school factors and other factors. It is the evaluation learning outcome of a process that is usually expressed in the quantitative form (numbers) specifically prepared for the evaluation process, for example, lesson grades, courses, and test scores (Hasan et al., 2021).

The extent to which financial resources lead to improvements in educational outcomes has been a long-standing area of debate among education policy scholars (Kreisman and Steinberg 2019). As tuition fees have risen over the years, students' and families' concerns have increased, prompting attention to government policies to address the rising costs (Lee et al., 2020). Little has been said in the literature about the direct effects of tuition fees on students' academic efforts. Hence, this study examined the amount of UKT and its effect on student academic achievement

The concept of principals' administrative skills

Principals' administrative skills are those skills of the school principal who must ensure that they are all directed towards efficient and effective teaching and learning in the school to be able to produce quality outputs. By implication, the principal of a school is a planner, director, controller, coordinator, organizer, adviser, and problem-solver (Mutiaraningrum, 2022). The principal is the person on whose shoulders rest the entire administration, success, or failure of the school. The principal identifies and sets goals and objectives of the school, which of course, must be in line with the national objectives, analyzes tasks and share responsibilities of the staff according to specialization and expertise (Akinnubi et al., 2023). Several studies have discussed the administrative skills of principals within the secondary school system, the principal stands out as the chief executive of the school, he is also the school administrator, the instructional leader, and the personnel manager for both the students' academic performance and staff personnel. The principal is also the finance and physical facility manager (Atanda & Abikoye, 2023).

One of the administrative skills of a principal is to maintain a good relationship with the teachers, and immediate community and also ensure continuous contact with the Ministry of Education in the area in which the school is situated. There are several categories of administrative skill areas of principals in the school system such as student personnel, staff personnel, instruction and curriculum development, school finance and business management, school plant and other general tasks (Adhikari & Budhathoki, 2023). The principal is a standard setter, one who leads in the development of an aspiration and expectation on the part of both teachers and students to do good work. A school principal needs to be skillful in providing solutions to teachers' problems by improving methods, materials and evaluation and thus; providing a good measure of quality control. One of the administrative skills of a principal is to improve teachers' testing techniques and develop their ability to analyze and interpret data. The principal as an administrator needs to possess certain administrative skills to effectively perform his duty (Ukozor & Edet, 2024).

Principals' financial skill

The financial skill of principals is defined as the determination, acquisition, allocation and utilization of assets or financial resources, usually with an overall goal in mind. It deals with the functions of investing and financing and school asset management. It involves analyzing financial situations, making financial decisions, setting financial objectives, formulating financial plans to attain those objectives and providing effective systems of financial control to ensure progress towards the set objectives of secondary education (Basake & Ashipu, 2024).

The financial skill of principals is important in the running of school activities. No formal organization has ever succeeded without financial resources. Therefore, it becomes imperative for institutions, firms, organizations and business entities to consider financial management to enhance good performance and mitigate against financial risks. Growth and development of the educational sector particularly secondary education in Nigeria is dependent on how well finances are managed. Kosgei and Lekhetu (2024) stated that the financial skill of principals includes not only financial activities and processes but also management activities, with both processes depending on the financial administrative system. The objective of the financial skill of principals in the federal government is to ensure that, the resources entrusted to it are acquired and used lawfully, efficiently, and effectively to the maximum practical extent. Given this, Dalton and Arpon (2024) observed that it is quite unfortunate that the little resources available are not effectively managed in Nigerian secondary schools. One thing is to raise funds, another is to ensure that the fund raised is well utilized by the school managers. However, to ensure judicious spending of funds and accountability, school administrators (principals) plan and prepare budgets for their schools.

Principals' physical facilities maintenance skill

Physical facilities maintenance skills which include the classrooms, libraries, technical workshops, laboratories, teachers' quality, school management, teaching methods, peers, etc. are the responsibilities of school principals to be effectively monitored through administrative skills of school principals (Olaifa et al., 2024). The physical characteristics of the school have a variety of effects on teachers, students, and the learning process. Poor lighting, noise, high levels of carbon dioxide in classrooms, and inconsistent temperatures make teaching and learning difficult. Poor physical facility maintenance and ineffective ventilation systems lead to poor health among students as well as teachers, which leads to poor performance and higher absentee rates (Zakso et al., 2018). Both students and teachers need facilities such as libraries, science resource corners, good drinking water and toilets. The current emphasis all over the world among educational practitioners is on learner-friendly school environments with learner-

friendly instructional delivery systems. Modern school environment emphasizes the provision of facilities such as adequate and spacious classrooms, workshops/laboratories, computers, good water source/supply, toilet facilities, functional libraries, transportation, and communication systems among others. All these facilities are required in appropriate quantity and quality (Ngerem & Iheanacho, 2017).

The learner is the center-point of learner-friendly education, which starts at the primary school level. Primary school is the fulcrum for all other levels of education. It is therefore important that care should be taken in organizing, coordinating and managing educational activities at the primary school level. Dewi et al. (2021) observed that no nation could produce the kind of citizens who would think creatively and help solve problems facing humanity without sound primary education. Thus, primary education occupies a critical position in the education system and its importance in the overall national and individual development cannot be overstressed.

Hypothesis development

Cost is an important aspect of students' college experience, and early perceptions of cost can be a driver or barrier to future academic success (Wu & Corpus, 2023). Generally, fees can affect both university enrollment among high school graduates (extensive margin) and degree completion among enrolled students (intensive margin) (Bietenbeck et al., 2020). In Germany, colleges that implement tuition fees lose about 3.8 to 7% of first-year student enrollment compared to those that do not implement tuition fees. In Germany, colleges that implement tuition fees lose about 3.8 to 7% of first-year student enrollment compared to those that do not implement tuition fees (Minor, 2023). Qi et al. (2022) found that receiving scholarships is positively correlated with good grades and increases the likelihood of obtaining high grades, whereas higher student loan funding reduces this likelihood. Scholarships also increase opportunities for study exchanges and seminars, help students achieve their study goals, and increase interactions with teachers and classmates. Beneito et al. (2018) find positive effects of the fee increase on UV students' level of effort, reflected in a lower number of registrations required to pass a module and a higher probability of passing with the first registration. The results were more visible in the case of average-ability students. Kreisman and Steinberg (2019) found that a \$1000 annual increase in foundation funding, or a 10% increase in expenditures, yields a 0.1 s.d. increase in reading scores and a near 0.08 increase in math. In Indonesia itself, Romlah et al. (2023) found that the free education policy at the elementary level directly has a significant impact of 68.5% on equitable education access, 29.6% on improving learning quality, and an indirect impact of 49.8% on improving learning quality. Equitable access to education had a direct and significant impact of 72.7% on improving learning quality.

Arif et al. (2018) examined personal education costs and learning achievement with the results of personal education costs having a positive effect on student learning achievement. The same was also shown by Nugroho (2022), who found that tuition fees and learning management systems have a significant effect on learning achievement. The results of research by Setiawati and Sukarno (2021) show that the UKT Revision affects student learning outcomes. The positive results of tuition fees and learning management with learning achievement are also shown by the research of Arif et al. (2018) on senior high school students. Yusuf and Sari (2022) explained that the KIP UKT scholarship affects student learning achievement. Likewise, research results show that the UKT payment system affects students' academic achievement (Octaviana, 2020). Likewise, research by Sumarno et al. (2017) on single tuition fees and the quality of education services also shows that the amount of UKT is relatively no different from non-UKT student tuition in terms of receiving quality education services. To prove the relationship between UKT and students' GPA, the following hypotheses were formulated.

H1: The average GPA of students in the UKT 1 category is not equivalent to the standard graduation GPA of 3.60.

H2: The average GPA of students in the UKT 2 category is not equivalent to the standard graduation GPA of 3.60.

H3: The average GPA of students in the UKT 3 category is not equivalent to the standard graduation GPA of 3.60.

H4: The average GPA of students in the UKT 4 category is not equivalent to the standard graduation GPA of 3.60.

H5: The average GPA of students in the UKT 5 category is not equivalent to the standard graduation GPA of 3.60.

H6: The average GPA of students in the UKT 6 category is not equivalent to the standard graduation GPA of 3.60.

H7: All groups exhibit varying average GPAs.

Method

This study used quantitative research methods. This research seeks the influence of the independent variable Single Tuition Fee (X), on the dependent variable of student academic achievement (Y).

Population and sample

The population of this study is all students of UIN Raden Mas Said Surakarta who graduated from 2021 to 2023, totaling 8,229 students. This study used a saturated sample of students who graduated from UIN Raden Mas Said Surakarta from 2021 to 2023. Determination of the year refers to the last three years of data to obtain the most recent data. This study used a purposive sampling technique ([Rahman et al., 2022](#)). The sample included undergraduate students who attended lectures and graduated between 2021 and 2023 and those who were enrolled under the Single Tuition Policy (UKT) as per the Minister of Religion's Decree (KMA), belonging to the same UKT categories as the 2018 and 2019 cohorts. According to these criteria, the total number of graduates was 8,229, comprising 7,917 undergraduate programs and 312 postgraduate programs, with 3,643 graduates from the classes of 2018 and 2019, forming the sample size for this study.

Data source

Data sources in research are divided into primary and secondary data sources ([Baas et al., 2020](#); [Birkle et al., 2020](#)). Secondary data were collected from the university's Planning and Finance and Academic Sections. Additionally, primary data were gathered through Focus Group Discussions with respondents from these sections at both the university and faculty levels, as well as students from six UKT groups across five faculties.

Data analysis

The data analysis technique used in this study is simple linear regression analysis. Simple linear regression analysis aims to determine the effect of the independent variable on the dependent variable. Descriptive statistics offer a general insight into a topic, while the Classical Assumption Test ensures the validity of data in linear regression analysis, followed by the Normality Test to assess if the data follows a normal distribution ([Afifah et al., 2022](#)). Data are said to be normally distributed if the significance value is more than 0.05 (Sig. ≥ 0.05). If the normality test is not fulfilled, the f-test and t-test will be invalid ([Demir, 2022](#)). Normality was tested using the Kolmogorov-Smirnov test. Linearity testing can be observed from the sig value. compared to 0.05, or F count compared to the F table. Criteria for the Sig value. > 0.05 , or F count $< F$ table, there is linearity; otherwise, if the value of Sig. < 0.05 or F count $> F$ table, then there is no linearity.

Hypothesis testing used a one-sample t-test with a significance level of 0.05 (Fu et al., 2021). The ANOVA test (Analysis of Variances) was used to perform multivariable comparative analysis using the F test because it is used for testing more than two samples (Liu & Wang, 2021). The t-test aims to measure how influential each independent variable is on the dependent variable in explaining variable variations. The t-test was performed by looking at the sig. t value with alpha 0.05 or 5% standard (Fu et al., 2021). Next, the R Square test aims to measure the extent to which the independent variables of the regression model influence the dependent variable using the adjusted R Square value. (Akhmedov, 2022). Regression analysis predicts the average value of the dependent variable based on the independent variable (Xu & Zammit, 2020). The linear regression equation was as follows: $Y = a + bX + ei$.

Results

The Faculty of Islamic Economics and Business was the largest with 1,834 students, whereas the Faculty of Tarbiyah Science was the smallest with 1,374 students. Over the years, there has been an increase in students receiving the 'Cumlaude' and 'Satisfactory' predicate, while the number of students with Satisfactory titles decreased, with none in 2022 and 2023. The Faculty of Economics and Islamic Business has the highest number of 'Cumlaude' (1,023 students), while the Faculty of Ushuluddin and Da'wah has the lowest (456 students). Additionally, the Faculty of Economics and Islamic Business is the only one with more Cumlaude titles than Satisfactory titles. Graduation ceremonies occur three times a year (March, July, and October), with an increasing number of graduates each year.

Statistics description

Table 1 reveals that the Single Tuition Fees (UKT) variable has an average of 2,483,859.46 and a standard deviation of 768,373.861, whereas the Grade Point Average variable shows an average of 3.66 and a standard deviation of 8.697.

Table 1. Descriptive statistics of the research sample

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Tuition fee	3643	400000	3500000	2483859.46	768373.861	59034E+11
GPA	3643	333	392	366.14	8.697	75.638
Valid N (listwise)	3643					

Classical assumption test

Normality test

Table 2 presents the results of the normality test using the Kolmogorov-Smirnov test for both the UKT and student academic achievement variables. The data are considered normally distributed if the significance value is greater than 0.05 (Sig. \geq 0.05). However, the normality test results indicated a Sig. value of $0.000 < 0.05$, suggesting that the data were not normal. Nonetheless, according to the central limit theorem, data with a sample size exceeding 30 are considered normal. Since the sample size in this study was 3,643, the data were deemed normal despite the normality test results.

Table 2. Normality test using One-Sample Kolmogorov-Smirnov

Unstandardized Residual		
N		3643
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	8.69576688
	Absolute	.035
Most Extreme Differences	Positive	.019
	Negative	-.035
Kolmogorov-Smirnov Z		2.133
Asymp. Sig. (2-tailed)		.000
a. Test distribution is Normal.		
b. Calculated from data.		

Hypothesis test

The significance level used to determine the results of the one-sample t-test was 0.05. The basis for decision-making is: (1) a significance value (2-tailed) < 0.05 indicates that there is a significant difference, and (2) a significance value (2-tailed) > 0.05 implies there is no significant difference.

Single tuition fee (UKT) category 1

In the UKT 1 category, there were 144 students. This test was conducted to compare the average GPA of students in the UKT 1 category with the standard GPA set in the Strategic Plan of UIN Raden Mas Said Surakarta Year 2020-2024, namely, at least 80% of graduates obtain a GPA greater than or equal to 3.60. Table 3 presents the results for the first hypothesis.

Table 3. One Sample T-test for UKT 1

	N	Mean	Std. Deviation	Std. Error Mean
UKT 1	144	366.2153	9.03231	.75269

Test Value = 360						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
UKT 1	8.257	143	.000	6.21528	4.7274	7.7031

Sig value $0.000 < 0.05$ shows that the H_0 hypothesis is rejected. Thus, the GPA of the UKT 1 students was different from the standard GPA of 3.60, which exceeded it by 3.66.

Single tuition fee (UKT) category 2

There were 524 students in the UKT 2 category. Table 4 shows the results of UKT 2's one-sample t-test.

Table 4. One Sample T-test for UKT 2

	N	Mean	Std. Deviation	Std. Error Mean
UKT 2	524	366.6813	8.60452	.37589

Test Value = 360					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
					Lower Upper
UKT 2	17.775	523	.000	6.68130	5.9429 7.4197

The significance value is $0.000 < 0.05$ indicating that H_a is accepted. Therefore, the GPA of the UKT 2 students was different from the standard GPA of 3.60, which exceeded it by 3.66.

Single tuition fee (UKT) category 3

In the UKT 3 category, there were 864 students in this study. Table 5 shows the results of the UKT 3 one-sample t-test.

Table 5. One sample t-test for UKT 3

	N	Mean	Std. Deviation	Std. Error	Mean
UKT 3	864	366.4630	8.19553		.27882

Test Value = 360					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
					Lower Upper
UKT 3	23.180	863	.000	6.46296	5.9157 7.0102

A significance value of $0.000 < 0.05$, indicates that the alternative hypothesis (H_3) is accepted. Consequently, the GPA of UKT 3 students differed from the standard GPA of 3.60, surpassing 3.66.

Single tuition fee (UKT) category 4

In the UKT 4 category, there were 1041 students. Table 6 presents the results of the one-sample t-test for UKT 4.

Table 6. One Sample T-test for UKT 4

	N	Mean	Std. Deviation	Std. Error	Mean
UKT 4	1041	366.0355	8.66190	2.6847	

Test Value = 360					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
					Lower Upper
UKT 4	22.482	1040	.000	6.03554	5.5087 6.5623

With a significance value of $0.000 < 0.05$, H_4 was accepted. Consequently, the GPA of UKT 4 students differed from the standard GPA of 3.60, exceeding it by 3.66.

Single tuition fee (UKT) category 5

In the UKT 5 category, 956 students were included in this study. Table 7 presents

the outcomes of the one-sample t-test for UKT 5.

Table 7. One sample t-test for UKT 5

	N	Mean	Std. Deviation	Std. ErrorMean
UKT 5	956	364.9749	8.84263	.28599

Test Value = 360						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
UKT 5	17.395	955	.000	4.97490	4.4137	5.5361

With a Sig. value of $0.000 < 0.05$, H5 is accepted. Hence, the GPA of the UKT 5 students differs from the standard GPA of 3.60, surpassing 3.64.

Single tuition fee (UKT) category 6

In the UKT 6 category, consisting of 114 students in this study, [Table 8](#) displays the outcomes of the one-sample t-test.

Table 8. One sample t-test for UKT 6

	N	Mean	Std. Deviation	Std. ErrorMean
UKT 6	114	371.8070	9.02394	.84517

Test Value = 360						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
UKT 6	13.970	113	.000	11.80702	10.1326	13.4815

A significance value of 0.000, less than 0.05, indicates the acceptance of H6. Consequently, the GPA of UKT 6 students is different from the standard GPA of 3.60, surpassing it by 3.71.

ANOVA test

Analysis of Variance (ANOVA) is a statistical method within inferential statistics, utilized for conducting multivariable comparative analyses. ANOVA employs the F-test, suitable for comparing more than two samples. Decision-making in ANOVA relies on the following criteria: (1) F value > F table or Sig value. < 0.05 then H0 is rejected or indicates there is a significant difference (2) F value < F table or Sig value. > 0.05 then H0 is accepted or implies no significant difference. [Table 9](#) illustrates that all UKT categories, spanning from categories 1 to 6, exhibit an average GPA surpassing 3.60, with category 6 having the highest average GPA at 3.71. Nevertheless, category 6 also features the lowest GPA among all research data, at 3.33.

Table 9. Description of GPA

	N	Mean	Std. Deviation	Std. Error	Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
5001	144	366.2153	9.03231	.75269	364.7274	367.7031	340.00	389.00

5002	524	366.6813	8.60452	.37589	365.9429	367.4197	337.00	388.00
5003	864	366.4630	8.19553	.27882	365.9157	367.0102	336.00	388.00
5004	1041	366.0355	8.66190	.26847	365.5087	366.5623	335.00	391.00
5005	956	364.9749	8.84263	.28599	364.4137	365.5361	338.00	392.00
5006	114	371.8070	9.02394	.84517	370.1326	373.4815	333.00	390.00
Total	3643	366.1392	8.69699	.14409	365.8567	366.4217	333.00	392.00

Table 10 shows the results of the homogeneity of variance test. The test results show that the variants of the six categories are the same (P-value = 0.347), so the ANOVA test is valid for testing this relationship.

Table 10. Homogeneity test

LeveneStatistic	df1	df2	Sig.
1.121		53637	.347

Table 11 presents the results of the ANOVA test. Based on the ANOVA test results, the significance value (Sig) provided insights into the statistical significance of the observed differences among the groups. obtained is 0.000 with a level of 0.05; therefore, $0.000 < 0.05$, and H_0 is rejected. Meanwhile, the F table is 2.215694 from the 5% level with df (5.3637) compared to the calculated F of 14.035; therefore, the calculated $F > F$ table indicates that there is a significant difference in the average GPA based on the UKT category.

Table 11. ANOVA test results

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5214.686	5	1042.937	14.035	.000
Within Groups	270257.755	3637	74.308		
Total	275472.440	3642			

Because there was a significant difference in the average GPA between categories, a post-hoc test was conducted to further analyze the specific group differences. Post hoc testing with a Multiple Comparisons table shows the results of further tests to find out specific differences between groups as well as to find out which of the groups has the highest score. The basis for decision-making is: (1) Sig value. < 0.05 then H_0 is rejected or shows there is a significant difference and (2) Sig value. > 0.05 then H_0 is accepted or implies there is no significant difference.

Table 12 shows the results of the post hoc test with the Multiple Comparisons table. The Multiple Comparisons table provides insights into the pairwise comparisons between UKT categories to determine which category has the highest average GPA score.

Table 12. Multiple comparisons

(I) UKT	(J) UKT	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
5001	5002	-.46602	.81107	.566	-2.0562	1.1242
	5003	-.24769	.77591	.750	-1.7689	1.2736
	5004	.17974	.76643	.815	-1.3229	1.6824
	5005	1.24038	.77055	.108	-.2704	2.7511
	5006	-5.59174*	1.08067	.000	-7.7105	-3.4730
5002	5001	.46602	.81107	.566	-1.1242	2.0562
	5003	.21833	.47730	.647	-.7175	1.1541
	5004	.64575	.46173	.162	-.2595	1.5510
	5005	1.70640*	.46855	.000	.7878	2.6250
	5006	-5.12572*	.89086	.000	-6.8724	-3.3791

(I) UKT	(J) UKT	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
5003	5001	.24769	.77591	.750	-1.2736	1.7689
	5002	-.21833	.47730	.647	-1.1541	.7175
	5004	.42742	.39672	.281	-.3504	1.2052
	5005	1.48807*	.40464	.000	.6947	2.2814
	5006	-5.34405*	.85897	.000	-7.0282	-3.6599
5004	5001	-.17974	.76643	.815	-1.6824	1.3229
	5002	-.64575	.46173	.162	-1.5510	.2595
	5003	-.42742	.39672	.281	-1.2052	.3504
	5005	1.06065*	.38615	.006	.3036	1.8177
	5006	-5.77147*	.85041	.000	-7.4388	-4.1041
5005	5001	-1.24038	.77055	.108	-2.7511	.2704
	5002	-1.70640*	.46855	.000	-2.6250	-.7878
	5003	-1.48807*	.40464	.000	-2.2814	-.6947
	5004	-1.06065*	.38615	.006	-1.8177	-.3036
	5006	-6.83212*	.85414	.000	-8.5068	-5.1575
5006	5001	5.59174*	1.08067	.000	3.4730	7.7105
	5002	5.12572*	.89086	.000	3.3791	6.8724
	5003	5.34405*	.85897	.000	3.6599	7.0282
	5004	5.77147*	.85041	.000	4.1041	7.4388
	5005	6.83212*	.85414	.000	5.1575	8.5068

Dependent Variable: IPKLS

*. The mean difference is significant at the 0.05 level.

Single tuition fee (UKT) category 1

In the Multiple Comparisons table, UKT category 1 shows a significant difference in Sig. values compared to other categories. When compared with UKT categories 2, 3, 4, and 5, Sig. values were greater than 0.05, indicating no significant difference in the average GPA. However, when compared with UKT Category 6, where Sig. value is 0.000 (< 0.05), indicating a significant difference in the average GPA between UKT categories 1 and 6.

Single tuition fee (UKT) category 2

In the Multiple Comparisons table, UKT category 2 (5002) shows a Sig. value that differs from the other categories. Comparing Sig. values; UKT category 2 with UKT categories 1, 3, and 4 displayed values greater than 0.05. Thus, it is accepted that there is no significant difference or the same average GPA value between UKT category 2 and UKT categories 1, 3, and 4.

Single tuition fee (UKT) category 3

In the Multiple Comparisons table, UKT category 3 (5003) exhibits a Sig. value that differs from the other categories. Comparing Sig. values, and UKT category 3 with UKT categories 1, 2, and 4 displayed values greater than 0.05. Therefore, there is no significant difference or the same average GPA value between UKT Category 3 and UKT Categories 1, 2, and 4. However, when compared with UKT Categories 5 (5005) and 6 (5006), the Sig. value is 0.000, signifying a significant difference between the average GPA in the UKT 3 category and the UKT 5 and 6 categories.

Single tuition fee (UKT) category 4

In the Multiple Comparisons table, UKT category 4 (5004) displays a Sig. value that differs from the other categories. When comparing Sig. values, UKT category 4 with UKT categories 1, 2, and 3 exhibited values greater than 0.05. Thus, there is no significant difference or the same average GPA value between UKT Category 4 and UKT Categories 1, 2, and 3. However, when compared with UKT Categories 5 (5005) and 6 (5006), the Sig.

value. is 0.000, signifying a significant difference between the average GPA in the UKT 4 category and the UKT 5 and 6 categories.

Single tuition fee (UKT) category 5

In the Multiple Comparisons table, UKT category 5 (5005) displays a Sig. value that differs from the other categories. When comparing Sig. values, UKT Category 5 with UKT Category 1 (5001) showed a value greater than 0.05. Therefore, there is no significant difference or the same average GPA value between UKT Category 5 and UKT Category 1. However, compared to UKT Category 2 (5002), UKT Category 3 (5003), UKT Category 4 (5004), and UKT Category 6 (5006), Sig. shows a value of 0.000, suggesting a significant difference between the average GPA of the UKT 5 category and UKT 2, 3, 4, and 6 categories.

Single tuition fee (UKT) category 6

In the Multiple Comparisons table, UKT category 6 (5006) shows a Sig. value similar to that of the other UKT categories. When comparing Sig. values, UKT Category 6 with UKT Category 1 (5001), UKT Category 2 (5002), UKT Category 3 (5003), UKT Category 4 (5004), and UKT Category 5 (5005) displayed a value of 0.000, indicating a significant difference between the average GPA in the UKT 6 category and all other UKT categories from UKT 1 to UKT 5.

It can be concluded that the UKT 6 and UKT 5 categories have an average GPA that is significantly different from the average GPA for the UKT 1, UKT 2, UKT 3, and UKT categories. 4. Meanwhile, UKT category 1, UKT category 2, UKT category 3, and UKT category 4 had the same average GPA or no significant difference.

To identify the UKT category with the highest average GPA, one can compare the Mean Difference (I-J) values between UKT categories. A positive Mean Difference (I-J) value indicates a higher score compared to other categories. Table 13 presents the comparison results between UKT categories.

Table 13. Category ranking

No.	Category	Rank
1	UKT 6 Category	5
2	UKT 2 Category	4
3	UKT 3 Category	3
4	UKT 1 Category	2
5	UKT 4 Category	1
6	UKT 5 Category	0

Partial test (t-test)

The t-test was performed by examining the sig value. t with an alpha of 0.05, or the equivalent of 5%. A significance level (sig value) of $t < 0.05$ indicates that the independent variable significantly affects the dependent variable, leading to the rejection of the null hypothesis (Ho) and acceptance of the alternative hypothesis (Ha).

Table 14. t-test

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	366.611	.488		751.820	.000

1	UKT	-1.900E-007	.000 -.017	-1.013	.311
---	-----	-------------	---------------	--------	------

a. Dependent Variable: GPA

Meanwhile, if the sig value. $t > 0.05$ means that the independent variable has no effect on the dependent variable. Table 14 shows the partial test results after the UKT variable was made a dummy variable because the data are nominal data. Table 14 presents the results. The t-test results show that H_0 is accepted.

Determination coefficient-test (R Square/R2)

The test aims to measure the extent to which the independent variables of the regression model influence the dependent variable. The coefficient of determination value was calculated by squaring the correlation coefficient (R) value or using the Adjusted R Square value. The coefficient of determination value is between 0-1. A value close to 0/small indicates that the ability of the independent/dependent variable to explain the dependent variable is limited. Meanwhile, if the value is close to 1, the independent variable provides all the information needed to account for variations in the dependent variable. Table 15 presents the test results.

Table 15. Coefficient of determination

Model	Model Summary			
	R	R Square	Adjusted RSquare	Error of theEstimate
1	.017 ^a	.000	.000	8.697

a. Predictors: (Constant), UKT

Based on the results of the coefficient table, the adjusted R Square value was 0.00. This clarifies that the single tuition variable does not affect academic achievement (GPA), meaning that it is influenced by other factors not examined in this research. Meanwhile, the magnitude of the impact of the Single Tuition Fee variable had a very small influence on student academic achievement (only 1.7 %). Hence, it can be concluded that single-tuition fees do not have an impact on academic achievement.

Simple linear regression analysis

Regression analysis predicts the average value of the dependent variable based on the independent variable. Based on the test results, the linear regression equation is as follows:

$$Y = 366.611 - 1.900X + e$$

A constant coefficient of 366.611 indicates that if the independent variable is assumed to have a value of 0, then the constant academic achievement value is 366.611. The regression coefficient for the single tuition variable was -1.900, indicating that single tuition cannot predict academic achievement. If a single tuition fee is increased by one unit, it will not affect the academic achievement value of 366,611. This shows that if single-tuition fees increase, there will be no effect on increasing student academic achievement.

Discussion

This study shows that all UKT categories (1-6) have significant differences from the GPA standards of UIN Raden Mas Said Surakarta's educational quality goals. All exceed the quality target and average GPA of graduates from 2021 to 2023. UKT category does not hinder students' academic achievement. Students of UIN Raden Mas Said Surakarta from UKT Categories 1 to 6 have equal educational opportunities and services. The university successfully provides equality in educational opportunities and quality services, resulting in student achievement that exceeds quality standards. However, there is a difference in

the average GPA between the UKT categories, even though the educational services received are the same. Based on the highest average GPA score: UKT 6, UKT 2, UKT 3, UKT 1, UKT 4, and UKT 5. UKT 6, the Bidikmisi scholarship category, tops the list with the highest GPA, indicating that the UKT category input affects academic outcomes. UKT 6 students were selected by strict selection and special requirements. Students in the UKT 6 category received assistance from the Academic and Student Affairs Department, such as character education, moderation, research training, and an inter-group Bidikmisi community. A special requirement for them is that their GPA must not decline every semester or that the scholarship will be revoked. These factors explain why UKT 6 had the highest average GPA. In contrast, UKT 5, with the highest tuition fees (IDR 2,500,000-Rp 3,500,000), had the lowest average GPA, although still above the university's target. This might relate to a previous study (Wu & Corpus, 2023) that "High-cost" students focus more on self-regulation than on a deep understanding of the subject matter. They often feel anxious about incompetence and the possibility of failure and prioritize non-academic activities (Wu & Corpus, 2023).

However, all UKT categories achieved the 'Cumlaude' predicate more often than 'Satisfactory,' UKT 5 students mostly come from the Mandiri (independent) pathway, which is the last choice after SPAN and UMPTKIN. This category also includes prospective students who do not apply for UKT requirements and are automatically included in the UKT 5 category. The difference in academic achievement in the UKT category indicates the need to review the student quota policy, considering aspects of prospective student input and activity assistance, not just income.

This supports the earlier discovery by Sumarno et al. (2017), which suggests that there is little distinction between UKT and non-UKT students regarding the quality of education services they receive. The results showed that a single tuition fee (UKT) does not affect the academic achievement of UIN Raden Mas Said Surakarta students. The average GPA of the students was not determined by the amount of UKT paid. The distribution of students with the title 'Cumlaude' is spread across all UKT categories, indicating that there is no injustice in educational services. All students received the same quality education, enabling them to perform well despite being in different UKT categories. UKT achieves its goal by cross-subsidizing and helping low-income students without limiting their potential due to tuition fees. However, there were still students who applied for a reduction in the UKT category. This is normal because students have the right to request a reduction if they object. The university provides UKT refutation opportunities for both new and old students. New students can submit a rebuttal at the beginning of the lecture, while older students can submit it if there are certain reasons, such as parents dying or being laid off.

This study contradicts a previous study that found that a higher percentage of students from economically disadvantaged backgrounds is strongly associated with decreased school performance (Etim et al., 2022). This challenges previous findings (Etim et al., 2022) that the number of disadvantaged students significantly predicts school performance. This study found that there is no difference in student achievement regardless of how much they pay for tuition fees, including those with scholarships. However, the steady growth in university enrolment over the last few decades, together with the adverse effects of the recent Great Recession, has led governments in several developed countries to approve significant cuts to higher education subsidies (Beneito et al., 2018). This also affects scholarship. Scholarship access is limited to students with high academic ability (GPA 3.00 and above), whereas it should be accessible to students with lower academic capacity to encourage their learning (GPA 3.00 and above) (Dalla & Kewuel, 2023). Scholarship receipt positively correlates with academic success and enhances the probability of achieving high grades, whereas increased student loan funding diminishes this likelihood (Qi et al., 2022). Children from rural areas are less likely to enroll in school because of educational costs that are not fully covered by subsidies and greater opportunity costs for work (Khiem et al., 2020). Thus, scholarship is crucial to be

given to students. This study proves that students from a low economy can achieve no less than those who pay more for their studies.

Sufficient financial support is essential to ensure the smooth operation of the educational process (Dalla & Kewuel, 2023). Rising tuition fees have raised concerns among parents and students and have been the target of political and social controversy (Lee et al., 2020). The implementation of UKT at UIN Raden Mas Said Surakarta still faces several problems, including underprivileged students who object to the UKT category charged, as well as additional costs outside the UKT. The number of students filing UKT appeals continues to increase, indicating dissatisfaction with the determination of the UKT categories. In addition, there are complaints about UKT increases and accelerated payment deadlines that are considered burdensome, as well as limited low UKT quotas for students in need. The criteria for determining UKT often do not accurately reflect the financial condition of students. Finance is one of the main points that need to be considered in managing universities. Therefore, campus managers need to formulate and determine a single tuition fee that can be reached by students and that does not reduce the quality of education services and student academic achievement.

Conclusion

The academic performance of students from all UKT categories showed significant differences, with a quality target GPA standard of 3.60. The average GPA of each UKT category exceeded the quality target standard. The average GPA values of each category also had significant differences, showing the variation in academic achievement among the categories. Although the order of the UKT categories with the highest GPA values is UKT Category 6, UKT Category 2, UKT Category 3, UKT Category 1, UKT Category 4, and UKT Category 5, the single tuition fee does not affect the academic performance of students at UIN Raden Mas Said Surakarta. This study confirms that factors other than the single tuition fee affect students' academic performance. Thus, an increase or decrease in a single tuition fee will not have an impact on students' academic performance, which is influenced by other factors.

This research has had a significant impact on the organization of education and learning at UIN Raden Mas Said Surakarta. Recommendations include increasing the quota of students in the UKT 6 category (Bidikmisi scholarship quota) and reviewing the quota and input of students in UKT categories 5 and 4. UIN Raden Mas Said Surakarta also needs to maintain the quality of educational services in all sectors, given that the average GPA exceeds the quality target standard of university graduates. The results show that a single tuition fee does not have a significant impact on student academic performance, so it is necessary to focus on maintaining and improving educational services and income.

Funding

This research is funded by Lembaga Penelitian dan Pengabdian Masyarakat the Universitas Islam Negeri Raden Mas Said Surakarta.

References

- Adhikari, N. P., & Budhathoki, J. K. (2023). The administrative skills of head teacher in educational institutions. *Journal of Parroha Multiple Campus (IRJPMC)*, 2(1), 69-79. <https://doi.org/10.5281/zenodo.10251005>
- Afifah, S., Mudzakir, A., & Nandiyanto, A. B. D. (2022). How to calculate paired sample t-test using spss software: from step-by-step processing for users to the practical examples in the analysis of the effect of application anti-fire bamboo teaching materials on student learning outcomes. *Indonesian Journal of Teaching in Science*, 2(1), 81-92. <https://doi.org/10.17509/ijotis.v2i1.45895>

- Akhmedov, B. A. (2022). Analysis of the reliability of the test form of knowledge control in cluster education. *Psychology and Education*, 59(2), 403–418. www.psychologyandeducation.net
- Akinnubi, O. P., Owonwami, O. A. ., & Olaiya, S. N. (2024). Principals' administrative skills in public senior secondary schools: A case of Ilorin Nigeria. *Journal of Educational Management and Instruction (JEMIN)*, 3(2), 126–134. <https://doi.org/10.22515/jemin.v3i2.8501>
- Arif, M., Nas, S., & Haryana, G. (2018). The effect of private education cost on student learning achievements in SMAN 5 Pekanbaru. *Jom Fkip*, 5, 1–14.
- Atanda, A. I., & Abikoye, O. O. (2023). School support services, principal administrative skills and teacher job commitment in public secondary schools in Ogun State, Nigeria. *African Journal of Educational Management*, 24(2), 270–289. <http://journals.ui.edu.ng/index.php/ajem/article/view/1296>
- Baas, J., Schotten, M., Plume, A., Côté, G., & Karimi, R. (2020). Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies. *Quantitative Science Studies*, 1(1), 377–386. https://doi.org/10.1162/qss_a_00019
- Basake, J. A., & Ashipu, B. A. (2024). Financial resource management skills required by secondary school principals in cross river state. *Journal of Association of Educational Management and Policy Practitioners*, 2(1), 18–18. <https://journals.aemapp.org>
- Beneito, P., Boscá, J. E., & Ferri, J. (2018). Tuition fees and student effort at university. *Economics of Education Review*, 64, 114–128. <https://doi.org/10.1016/j.econedurev.2018.03.012>
- Bietenbeck, J., Marcus, J., & Weinhardt, F. (2020). Tuition fees and educational attainment. Centre for Economic Performance. <https://files.eric.ed.gov/fulltext/ED622196.pdf>
- Birkle, C., Pendlebury, D. A., Schnell, J., & Adams, J. (2020). Web of Science as a data source for research on scientific and scholarly activity. *Quantitative Science Studies*, 1(1), 363–376. https://doi.org/10.1162/qss_a_00018
- Dalla, D. P., & Kewuel, H. K. (2023). Ketimpangan akses beasiswa dan pengaruhnya terhadap keberlangsungan studi mahasiswa. *Educare: Jurnal Penelitian Pendidikan dan Pembelajaran*, 3(2), 52–59. <https://doi.org/10.56393/educare.v3i2.1702>
- Dalton, W., & Arpon, A. (2024). Principals' Management Skills and School Academic Achievement. *Journal of Innovative Technology Convergence*, 6(2), 9–20. <https://doi.org/10.69478/JITC2024v6n002a02>
- Demir, S. (2022). Comparison of normality tests in terms of sample sizes under different skewness and kurtosis coefficients. *International Journal of Assessment Tools in Education*, 9(2), 397–409. <https://doi.org/10.21449/ijate.1101295>
- Dewi, C., Windoro, D., & Pura, D. N. (2021). Management of physical education facilities and infrastructure. *Journal of Education Technology*, 5(2), 291–297. <https://doi.org/10.23887/jet.v5i2.34450>
- Etim, J. S., Etim, A., & Blizard, Z. (2022). Economically disadvantaged, incoming readiness and school achievement: Implications for building high-performing and effective schools. *Education Sciences*, 12(8), 558. <https://doi.org/10.3390/educsci12080558>
- Fu, Q., Hoijsink, H., & Moerbeek, M. (2021). Sample-size determination for the Bayesian t-test and Welch's test using the approximate adjusted fractional Bayes factor. *Behavior Research Methods*, 53(1), 139–152. <https://doi.org/10.3758/s13428-020-01408-1>
- Hasan, M., Mainuddin, Ridha, Z., Ambarsari, I. F., Anggeraini, D., Fahrurnisa, Hasanah, N., Hermawan, S., Pandiangan, E. L., Harahap, T. K., Syahfitri, D., Fauziah, M., Batubara, N. A., Asmi, A. R., Sariyani, N., & Hamzah, H. (2021). Pendidikan dan psikologi perkembangan: implementasi prinsip-prinsip psikologi dalam pembelajaran. *Penerbit Tahta Media*. <http://tahtamedia.co.id/index.php/issj/article/view/190>
- Kemendikbud. (2013). Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 55 Tahun 2013 tentang Biaya Kuliah Tunggal dan Uang Kuliah

- Tunggal pada Perguruan Tinggi Negeri di Lingkungan Kementerian Pendidikan dan Kebudayaan. 2013.
- Khiem, P. H., Linh, D. H., & Dung, N. D. (2020). Does tuition fee policy reform encourage poor children's school enrolment? Evidence from Vietnam. *Economic Analysis and Policy*, 66, 109-124. <https://doi.org/10.1016/j.eap.2020.03.001>
- Kosgei, P. K., & Lekhetu, M. (2024). Relationship between Principals' Competencies in Procurement and Performance of Financial Management Roles in Public Secondary Schools in Kajiado County, Kenya. *British Journal of Education*, 12(5), 82-109. <https://tudr.org/id/eprint/2975/>
- Kreisman, D., & Steinberg, M. P. (2019). The effect of increased funding on student achievement: Evidence from Texas's small district adjustment. *Journal of Public Economics*, 176, 118-141. <https://doi.org/10.1016/j.jpubeco.2019.04.003>
- Lee, Y. H., Kim, K. S., & Lee, K. H. (2020). The effect of tuition fee constraints on financial management: Evidence from Korean private universities. *Sustainability*, 12(12), 5066. <https://doi.org/10.3390/su12125066>
- Liu, Q., & Wang, L. (2021). t-Test and ANOVA for data with ceiling and/or floor effects. *Behavior Research Methods*, 53(1), 264-277. <https://doi.org/10.3758/s13428-020-01407-2>
- Minor, R. (2023). How tuition fees affected student enrollment at higher education institutions: the aftermath of a German quasi-experiment. *Journal for Labour Market Research*, 57, 28. <https://doi.org/10.1186/s12651-023-00354-7>
- Mutiaraningrum, I. (2022). The roles of school principal: An insight from disadvantaged areas of Indonesia. *Journal of Educational Management and Instruction (JEMIN)*, 2(1), 35-44. <https://doi.org/10.22515/jemin.v2i1.5071>
- Ngerem, E. I., & Iheanacho, S. C. (2017). Overcoming economic recession through principals' effective management of school facilities for quality education delivery. *International Journal of Innovative Studies in Sociology and Humanities (IJISSH)*, 2(6), 37-43.
- Nugroho, W. (2022). Pendekatan blended learning model class demonstration untuk mengatasi kesulitan belajar dan meningkatkan prestasi belajar fungsi kuadrat dan fungsi komposisi. *Al Khawarizmi: Jurnal Pendidikan Dan Pembelajaran Matematika*, 5(2), 113-131. <https://doi.org/10.22373/jppm.v5i2.11529>
- Octaviana, S. (2020). *Pengaruh sistem pembayaran ukt terhadap prestasi akademik mahasiswa (Studi Kasus Mahasiswa Jurusan Pendidikan IPS UIN Syarif Hidayatullah Jakarta)*. Undergraduate Thesis. UIN Syarif Hidayatullah Jakarta.
- Olaifa, A. S. ., Ajala, S. ., Olaifa, E. O. ., Medupin, A. J. ., & Adeoye, M. A. . (2024). Principals' Fund Management Strategies and School Administrative Effectiveness. *Indonesian Journal of Educational Research and Review*, 7(1), 107-115. <https://doi.org/10.23887/ijerr.v7i1.69972>
- Qi, S., Ma, Q., & Ji, X. (2022). The influence of financial aid systems on student academic development in higher education in China. *Sustainability*, 14(21), 14068. <https://doi.org/10.3390/su142114068>
- Rahman, M. M., Tabash, M. I., Salamzadeh, A., Abduli, S., & Rahaman, M. S. (2022). Sampling techniques (probability) for quantitative social science researchers: A conceptual guidelines with examples. *SEEU Review*, 17(1), 42-51. <https://doi.org/10.2478/seeur-2022-0023>
- Romlah, S., Imron, A., Maisyaroh, Sunandar, A., & Dami, Z. A. (2023). A free education policy in Indonesia for equitable access and improvement of the quality of learning. *Cogent Education*, 10(2), 2245734. <https://doi.org/10.1080/2331186X.2023.2245734>
- Setiawati, N. A., & Sukarno, S. (2021). Tinjauan beasiswa uang kuliah tunggal dan motivasi belajar di perguruan tinggi swasta. *Journal Fascho in Education Conference-Proceedings*, 2(1). <https://doi.org/10.54626/proceedings.v2i1.118>

- Sumarno, S., Gimin, G., & Nas, S. (2017). Dampak biaya kuliah tunggal terhadap kualitas layanan pendidikan. *Kelola: Jurnal Manajemen Pendidikan*, 4(2), 184. <https://doi.org/10.24246/j.jk.2017.v4.i2.p184-194>
- Ukozor, C. U., & Edet, I. N. (2024). Principal's managerial conceptual skills and teachers job performance in secondary schools in Nigeria. *International Journal of Learning Development and Innovation*, 1(1), 1-8. <https://gscjournal.com/IJLDI/article/view/2>
- Wu, S. H., & Corpus, J. H. (2023). The role of perceived cost in college students' motivational experiences and long-term achievement outcomes: A mixed-methods approach☆. *International Journal of Educational Research Open*, 4, 100229. <https://doi.org/10.1016/j.ijedro.2023.100229>
- Xu, W., & Zammit, K. (2020). Applying Thematic Analysis to education: A hybrid approach to interpreting data in practitioner research. *International Journal of Qualitative Methods*, 19, 1-9. <https://doi.org/10.1177/1609406920918810>
- Yusuf, E., & Sari, W. (2022). Pengaruh beasiswa KIP Uang Kuliah Tunggal (UKT) terhadap prestasi belajar mahasiswa Program Studi Pendidikan Ekonomi Fakultas Keguruan Dan Ilmu Pendidikan Universitas Muhammadiyah Bengkulu. *Jurnal Multidisiplin Dehasen (MUDE)*, 1(3), 189 -196. <https://doi.org/10.37676/mude.v1i3.2496>
- Zakso, A., Agung, I., & Capnary, M. C. (2018). The influence of principal leadership, teacher learning characteristics, and utilization facilities on student thinking skill. *International Journal of Educational Policy Research and Review*, 5(9), 166-173. <https://doi.org/10.15739/IJEPRR.18.019>
-