

Research Article

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The Impact of the Accreditation Incentive Fund (DIA) Intervention on the Quality of LPTK Management

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Abstract

Higher education institutions/the Educational Personnel Education Institution (LPTK) have experienced an increase in producing qualified teacher in this couple of years. At the same time, universities have responsibility to increase the qualifications of teachers and the quality of teacher. Data collected from Accreditation Incentive Fund (DIA) program is used to increase the management capacity of the Institute of Education Personnel Management (LPTK) in 2009 to 2012. The data of this study include five aspects of DIA fund utilization, namely: improvement of governance, program management, learning processes, academic atmosphere, and information systems. This study investigates the impact of the accreditation incentive fund intervention on the quality of LPTK management. We hypothesize that DIA incentive funds to LPTK has an impact in improving the quality of LPTK management significantly. The results indicate that the impact of DIA incentive funding can be only seen when the PGSD group received the DIA (experimental group) compared to the partner group and the non-educational group.

Keywords: Higher education; Quality; Intervention; Accreditation Incentive Fund

1. Introduction

The education system has recently been enlivened by the pros and cons of school zoning policies, which can be interpreted as substantially placing children in public schools based on residency zones or areas. To better understand zoning policies, it is better to place these policies on the perspective and paradigm of education known as quality, on the one hand, and equity (access and opportunity), on the other hand. Although the scale may vary between countries, almost all education systems set their policies on the provision of quality and equitable education. These two poles become political witnesses for an educational policy maker in processing innovative and transformative ideas that are

needed as instruments of novelty. Strangely, the two poles are often unable to walk together, especially experienced by large countries in the transitional period, such as Indonesia. The amount of burden that must be borne simultaneously in the education system becomes a dilemma when quality improvement policies take precedence, equity programs become the second priority, and vice versa.

The zoning system is inseparable from the struggle of educational policy choices in the spectrum of quality and access, which seems to favor the ease of access for students by "ignoring quality". Neglect of quality is defined as not putting quality as the first part of the policy, but making access become more important instead. Against a background of high gap conditions and limited funding capability (loans are seen as a limitation) while the problem map is mounting, policy choices must be made because the reality of improving both of them is difficult to be implemented simultaneously. On the other hand, the performance of a policy maker will be judged by innovative ideas and transformative steps taken. Along with the bureaucrats who have been in the existing system, not infrequently these two poles have the power of innovation or transformative steps as a form of change from previous policies taken from one of the poles. This policy selection is basically valid, only what often happens is that the policy is complex because it is not understood by all policy makers at the implementation level, so that innovation is not optimal. For the record, the zoning system was chosen as an effort to replace the previous non-zoning system which formulated the quality of the school in stages as a pilot school and an international standard school. In this system, the policy takes precedence over quality first and then access, compared to the zoning system that prioritizes access then quality.

Noises arose as a result of the establishment of traditions that were formed earlier in which the community is in space barriers with the reality that the socio-economic level of society is diverse. In the perspective of school choice, parents with high socioeconomic levels have more choices than parents with low socioeconomic positions, which certainly do not have many choices. This cultural tradition was formed by a long-standing civilization, which has been firmly rooted in the behavior of the community in the selection of schools for their children. It is very natural that the culture is formed in these communities, in which parents will register their children in the "favorite" "international" school. Those labels were put in public schools as an effort by the government to make public schools were able to compete with prestigious private schools. The path of government policy was actually not mistaken because, in the long run, all public schools became prestigious schools, resulting in international standard schools, international standard pilot schools, and "toward" international schools. There were even schools that held schools from countries whose progress has lagged behind Indonesia - with foreign reasons, to sell their schools internationally. The benefits of international standard school policy were undeniable, precisely that there was a high level of co-sharing of funding from the community. It meant that the community showed enough participation in education funding through their direct contribution to schools. On the positive side, it was uncommon for parents who are usually to play an active role in school activities, donating funds, or other infrastructure needed by their children's schools. From the negative side, the occurrence of "games" between parents and unscrupulous school members and too strong the grip of parents made the school lose its power and so on. As a result of this system and not achieving the quality as an international standard school for all public schools, bitterness was certainly felt by the lower economic strata, with objects of educational discussion as children of disadvantaged families would be in schools that match their economic levels. Therefore, no matter how the government gave a quota to poor families, it could not be filled.

The culture is suddenly cut by a zoning policy that is clearly more pro to equity or access to education. This policy change is not well understood by the community or is less acceptable, especially among people with wealthy families in which their children have to go to school in addition to a house that was once just moved. The end of almost education policies as a public sector is to ensure the availability of quality educational processes and output or more precisely the smaller distribution program due to the evenly distributed quality of education. Input is not the realm of education policy because it is the estuary of sector programs such as health, welfare, and other

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sectors. If only the process and output of education can become the focus of the government and succeed in putting it on a high level, one axis, i.e. equity can be overcome, all that's left is quality improvement. Although it seems simple, guaranteeing the process and quality of educational outcomes is not easy, because it involves the quality of the teaching staff, especially teachers (both teachers and lecturers), and teaching and learning infrastructures. We can see quality schools sell more quality processes by providing quality instructors, infrastructure, environment, and instructional classroom atmosphere, as well as extracurricular activities that are well-packaged.

This condition does not only needs massive funding to be disbursed but also requires a "revolutionary" cultural change. This change makes collective consciousness capable of transforming civilizations which are still dominated by individualist clouds becoming efficient collective behavior, promoting social interests as social responsibility, and as the domino effect of government leadership. Collective awareness is more difficult to present than the funding. It is the responsibility of the leaders to set an example that life needs to be more efficient in all aspects while still working hard and wish that horizontal conflict will decrease.

The problem of improving the quality and distribution of teachers in Indonesia is not simple given the breadth of geography and population, the qualifications of teachers and the quality of teacher producing institutions (LPTK), as well as the establishment of the community's cultural behavior. As a public sector in the development of human resources, educational policies often cause pros and cons in society while any policy taken may not unanimously benefit all parties. The wisest education policies such as improving quality and access often lead to pros and cons in their implementation. With the combination of various variables above, it is not surprising that the increase is slow even though large budgets have been allocated from time to time through various government policies. Government intervention is carried out through various schemes and improvement programs, including efforts to provide quality teachers at various levels and levels of education. The provision of quality teachers starts from government intervention through various enhancements of teachers in positions as down streaming to upstreaming interventions on teacher producing institutions, which are often referred to as the Educational Personnel Education Institution (LPTK). One of the teacher quality improvement programs is provided through the Accreditation Incentive Fund (DIA) program to increase the management capacity of the Institute of Education Personnel Management (LPTK) to be able to produce gualified teacher candidates.

It has become a necessity, so that the intervention program can be measured to increase. Research needs to be carried out to obtain information on how far the improvement efforts that have been made have an impact on the intended target. One program that requires research or evaluation is to measure the impact of the Accreditation Incentive Fund (DIA) program on improving the quality of LPTK management. Specifically, research was conducted to obtain information on the extent of government intervention as an effort to increase LPTK, especially the Primary School Teacher Program (PGSD) through the DIA scheme which has an impact on improving the management of educational personnel producing institutions, which in turn has an impact on improving the quality of graduates. The results of the study provide information on the extent to which government intervention in LPTK through the DIA scheme enhances various aspects of management, which leads to improve the quality of teacher candidates.

2. Literature Review

2.1 The Role of Teachers in Instructional Classes

The magnitude of the teacher's role is shown in various studies. Even, it is believed that teachers have a far greater role than other actors in education, such as school principals or even policy makers (Creemers, 1994, Darling-Hammond, 1997; Harris & Muijs, 2005; Luyten & Snijders, 1996; Marzano, 2007; Van der Werf et al., 2000). It is because teachers interact more directly with students through the teaching and learning processes compared to other educational actors. However, it is not easy to

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determine the characteristics of teachers who actually contribute the most to student success in learning (Goe, Laura & Stickler, 2008).

Teacher characteristics that are often used as indicators of teacher quality include teacher certificates, level of education, experience, and pedagogical knowledge, mastery of material, and professional development (Heck, 2007; Boyd et al., 2006; Smith et al., 2005; Goldhaber, 2002). Previous research results on the relationship between teacher quality variables and standardized test results show that schools with a majority of students from low economic class and students with low learning motivation are often taught by low qualified teachers (Goi, 2007; Loeb, 2001; and Beleille & Loeb, 2009). These findings reinforce the belief that gualified teachers will influence the guality of student learning as well as a good mediator of inequality of learning opportunities among students (Darling-Hammond, 2006 and Smith et al., 2005). The strong relationship between teacher quality and student learning quality need not to be doubted (Greenwald, Hedges, and Laine, 1996), although contradictions often occur between study findings. For example, Laczko-Kerr and Berliner (2002) concluded that the level of mastery of a teacher's material has more influence on the achievement of student learning outcomes at the secondary school level compared to its effect on elementary school students. In addition, if the old teaching experience of teachers often shows quality, the findings of other studies show that there are teachers with long experience who actually feel a higher difficulty in understanding new curriculum material than teachers who are relatively new.

3. Research Methodology

The types of data in this study include five aspects of DIA fund utilization, namely: improvement of governance, program management, learning processes, academic atmosphere, and information systems. Data was collected in 2012 through a DIA management questionnaire and head of the study program. However, the data presented was processed from the results of collecting questionnaires from DIA managers from 15 recipient LPTKs, as can be seen in Table 1 and Table 2.

No.	Study Programs	Number of LPTKs	Data 1	Data 2	Data 3	Data 4
		Number of LFTKs	2009	2010	2011	2012
1.	PGSD-DIA	5	v	v	v	v
2.	PGSD Non-DIA	4	v	v	v	v
3.	Partner	3	v	v	v	v
4.	Non-Education	3	v	v	v	v

Table 1. Data Sources Evaluation of the Impact of DIA on Improving Management Quality

Note: A. 1. PGSD = PGSD recipient of DIA; 2. Non-DIA PGSD = PGSD which did not receive DIA at the time of the study; 3. Partner = Education program is not PGSD and is not a recipient of DIA; 4. Non-Education = study program is not education and does not accept DIA. B. The PGSD-DIA, Partners, and Non-Education data in this study were taken from the DIA recipient LPTK for their PGSD which became the study samples. While Non-DIA PGSD data was taken from LPTK with PGSD not the recipient of DIA.

Table 2. Data LPTK with DIA Characteristics and Accreditations (2008 and 2012)

No	LPTK	DIA Characteristics	2008	2012
1.	PGSD 1	В	BT	В
2.	PGSD 2	А	С	С
3.	PGSD 3	В	BT	С
4.	PGSD 4	В	BT	C (huge)
5.	PGSD 5	А	BT	В
6.	PGSD 6	А	BT	В
7.	PGSD 7	А	BT	В

No	LPTK	DIA Characteristics	2008	2012
8.	PGSD 8	А	BT	В
9.	PGSD 9	А	BT	В
10.	PGSD 10	А	С	В
11.	PGSD 11	В	D	В
12.	PGSD 12	А	BT	В
13.	PGSD 13	В	С	С
14.	PGSD 14	А	BT	В
15.	PGSD 15	В	С	В

Note: BT = Not accredited, Category A = LPTK in 2006 received the Competitive Grant Program (PHK) from the Director General of Higher Education, category B was the LPTK which in 2006 had never received the Competitive Grant Program (PHK).

3.1 Data Analysis

With reference to the objectives, namely the impact of providing competitive funding assistance DIA to the LPTK on improving LPTK management, several sources of data were obtained. Data collected included many aspects, namely: 1) work motivation, 2) PGSD performance/study programs, 3) staff development, 4) equipment and furniture, 5) inviting experts, 6) library collections (number), 7) program development, 8) teaching grants, 9) research grants, and 10) incentives for scientific work. Among these aspects, the performance of the study program has more sub-aspects. The type of data collected was a tendency from one year to the next, starting from 2009 to 2012. The structure of study program performance data can be divided into three levels or hierarchies, namely "time", PGSD/study programs, and universities. Time is data retrieval in a particular year, in this case there are at least 4 times (2009, 2010, 2011, 2012). PGSD or study program is a recipient institution or non-recipient of DIA, either PGSD is a core recipient institution and the study program exists. For other data, the emphasis is not the tendency from one year to the next so that there are only two data hierarchical structures, namely PGSD/study programs and universities.

Numerical data were analyzed numerically, while interview data were analyzed qualitatively. Regarding numerical data analysis, in general, it is divided into two stages. First, descriptive analysis aims to get a general picture. By referring to the data hierarchy, the second analysis uses multilevel modeling to obtain a more accurate estimate of the impact of DIA (Snijder & Bosker, 1999; Rabe-Hesketh & Skrondal, 2008). The use of this model is important because, compared to conventional statistical analyses such as different tests (t-test and ANOVA) and regression, multilevel modeling has advantages because of the inclusion of variance at each level/hierarchy of data so that the estimations made are more accurate. In this study, multilevel modeling was carried out using MLwiN (Rasbash et al., 2005).

Descriptive analysis includes frequency tabulation, different tests, and effect size analysis. Tabulation was carried out to provide a general picture and was carried out on all collected variables. Different tests were carried out, for example, to see the significance of the difference between PGSD work motivation/study programs before and after receiving the DIA. In addition, effect size analysis was also carried out, for example, to see how much change in work motivation before and after receiving the DIA assistance. These two statistical analyses were used to summarize the impact of DIA on PGSD work motivation/study programs. In analyzing the effect size, the coefficient d = .2 meant the change was small, while d = .5, the change was moderate, and d = .8 meant the change was large (Cohen, 1992).

Furthermore, multilevel modeling was used primarily to analyze data regarding the performance of PGSD or study programs. Several models were developed in analyzing. The "empty" model was used to find out the variance at each level/hierarchy: 1) the variance in time (from one measurement to another), 2) the variance in PGSD/study programs, and 3) the variance in the university. The next model was carried out to determine the impact of DIA, where 1 dummy variable

was created (1 = DIA, o = non-DIA). The final model examined whether the recipient of the DIA had a significant development in the period of time by looking at the interaction between "time" and DIA.

Qualitative analysis was used to find themes on the results of interviews with department leaders or deans. More specifically, from the results of the interview, themes were found to find patterns of program sustainability even though the DIA program had ended. From these patterns, it is expected to find similarities or differences in the ability of each LPTK to continue the post-DIA program. This research was limited by unavoidable limitations. At the level of DIA recipients, survey instruments compiled in detail related to management aspects turned out to be only a small part that was able to provide information even though requests for completeness were repeated in the following year, 2012.

4. Empirical Results

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4.1 Impact of the Accreditation Incentive Fund (DIA) to the LPTK on improving the quality of LPTK management (PGSD)

The quality of LPTK management in the context of this study is PGSD, seen from many indicators which are categorized into five aspects: 1) improvement of governance, 2) improvement of program management, 3) improvement of conducive academic atmosphere, 4) improvement of information systems, and 5) improvement of the quality assurance system. If explained in detail, all of these aspects include seeing the number of graduates becoming teachers and non-teachers, the number of lecturers according to their level of education, the number of certified lecturers, the number of publications both nationally and internationally, the number of library collections, the number of researches and the number of national and international collaborative work.

Data collected in various aspects were collected quite complete and had a hierarchy. The first hierarchy was "time" because the data collected was a trend from one year to the next. The second hierarchy was PGSD/Study program, and the third one was university. For this second research question, multilevel modeling analysis was used to obtain a more accurate estimate of the impact of the DIA on the quality of LPTK management, given the data collected to answer this research question had a hierarchy that was important to consider while doing estimation (Rabe-Hesketh & Skrondal, 2008 and Snijder & Bosker, 1999).

Relating to the analytical model developed, the "empty" model was carried out to find out the variance at each level/hierarchy: 1) variance in time (from one measurement to another), 2) variance in PGSD/study programs, and 3) variance within the university. The next model is the time model, which was used to see if there were significant changes from one year to the following years. The final model was used to find out whether PGSD recipients of DIA were better than the other three groups, namely Non-DIA PGSD, partners (DIA recipients) and non-educational programs (both recipients and non-DIA). Both time and DIA were significant at $p \le .05$ if t-statistics (coefficient/SE) was at least 1.96. The impact of DIA assistance to the LPTK on the quality of LPTK management was not found in all aspects. The results of the data analysis show that the impact of DIA assistance was seen only in a number of aspects in improving civil service governance and quality control.

The first impact can be seen in the number of certified lecturers. Analysis of data using multilevel modeling shows several important things that cannot be demonstrated by conventional statistical analysis, such as regression. First, multilevel modeling (Rabe-Hesketh & Skrondal, 2008 and Snijder & Bosker, 1999) is able to show variations in the level of time, study programs, and universities. As seen in Table 3, the results of data analysis using MlWin software (Rasbash, Charlton, Browne, Healy, & Cameron, 2005) illustrate the considerable variation in the 'time' level, which was 61% indicating the large difference in the number of certified lecturers from time to time. The variation at the study program level was 39%; while at the university level, there was no variation. Regarding variations in the 'time' level, the results of the analysis also show a significant increase from one year to the next. However, PGSD recipients of DIA had no difference compared to non-DIA PGSD. This means that the number of certified lecturers in PGSD receiving DIA was not more than the number of certified

lecturers in non-DIA PGSD. However, if compared to the group of partners and non-educational programs, the number of lecturers certified in PGSD DIA was significantly more.

	Empty		Time		PGSD DIA	
	Coeff	SE	Coeff	SE	Coeff	SE
Fixed Part						
Intercept	14.137**	2.043	5.381	3.072	10.361*	3.760
Time			3.502**	0.918	3.502**	0.918
PGSD Non-DIA					5.933	5.957
Partner					-10.144*	4.033
Non-Education					-14.054*	6.491
Random Part						
Level: University						
Intercept	о	о	о	о	0	0
Level: Study program						
Intercept	126.025	38.768	131.136	38.67	88.827	29.564
Level: Time	-					
Intercept	197.343	24.863	176.899	22.287	176.899	22.287
-2*loglikelihood:	1417.898		1404.118		1392.522	
Decrease in deviance			13.780**		11.596**	
Variance explained by the mo	del		0.05		0.14	

Table 3. Multilevel Analysis of Certified Permanent Lecturers

Note: * *p* <=.05, ** *p* <= .01

The next impact can be seen in the number of lecturers conducting research. However, a positive impact can only be seen when PGSD recipients of DIA were compared to the group of partners and non-educational study programs. As seen in Table 4, PGSD DIA had more significant number of lecturers who have conducted research only when compared to the partner group. Meanwhile, when it was compared to the non-DIA PGSD group and non-educational study group groups, there was no difference.

 Table 4. Multilevel Analysis of the Number of Lecturers Conducting Research

	Empty		Time		PGSD DIA	
	Coeff	SE	Coeff	SE	Coeff	SE
Fixed Part						
Intercept	14.970**	1.941	11.667**	2.154	15.46**	3.177
Time			1.321**	0.374	1.321	0.374
PGSD Non-DIA					-0.755	6.062
Partner					-6.713°	3.911
Non-Education					-9.129	6.478
Random Part						
Level: University						
Intercept	5.646	29.658	5.646	29.658	14.108	28.133
Level: Study program						
Intercept	137.286	42.479	138.013	42.477	117.016	36.566
Level: Time						
Intercept	32.26	4.064	29.35	3.698	29.35	3.698
-2*loglikelihood:	1183.377		1171.465		1167.589	
Decrease in deviance			11.912**		3.876	
Variance explained by the n	nodel		0.01		0.07	

Note: ° *p* <= .10, * *p* <=.05, ** *p* <= .01

Regarding variations at the three levels, the analysis shows that the largest variation was at the study program level, i.e. 42%, indicating the variation at the study program level. Meanwhile, at the university level, the variation was 30% in terms of the number of lecturers conducting research. Furthermore, the variation in the 'time' level was not large, i.e. 4%.

	Empty		Time		PGSD	
	Coeff	SE	Coeff	SE	Coeff	SE
Fixed Part						
Intercept	69.371**	5.431	68.485**	6.814	67.762**	8.793
Time			0.354	1.646	0.354	1.646
PGSD Non-DIA					15.958	15.294
Partner					7.256	8.929
Non-Education					-53.899**	15.454
Random Part Level: University						
Intercept	34.057	233.666	34.057	233.666	273.166	205.297
Level: Study program	2. 2.					
Intercept	1019.094	339.472	1019.146	339.472	500.152	192.15
Level: Time						
Intercept	568.979	71.685	568.77	71.658	568.77	71.658
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Deviance (-2^loglikelihood)	1631.912		1631.866		1618.361	
Decrease in deviance			0.046		13.551**	
Variance explained by the mode	[0.00		0.17	

Table 5. Multilevel Analysis of Graduates Becoming Teachers

Note: ° *p* <= .10, * *p* <=.05, ** *p* <= .01

Furthermore, the impact of DIA funding can be seen in improving quality assurance. In this context, quality assurance was seen from the profession of LPTK graduates, although this effect was only seen when PGSD recipients of DIA were compared to non-educational groups. The results of the analysis of this data explain that the number of graduates in the PGSD recipients of DIA who became teachers was far more than that of the non-educational group. On the contrary, the number of graduates who did not become teachers at PGSD recipients of DIA was far less than that of the non-educational group. This finding is very reasonable considering students who enter the LPTK are indeed expected to become teachers.

Table 5 describes the results of multilevel analysis on aspects of the number of graduates becoming teachers. Intercept in fixed part in the empty model shows the average graduates who became a teacher for 4 years (2009 - 2012) were 69,371. The empty part model empty shows the variation component at the time, study program, and university level, which shows that the variation at the study program level was greater (69%) compared to the variation at the time and university level.

The next model looked at the impact of time in which the results explain the absence of changes in the average number of graduates who became teachers from year to year. However, as seen in the next model, when compared to non-educational programs, the number of graduates from PGSD receiving DIA who become teachers was far greater. However, compared to PGSD Non-DIA and partners, there were no more or fewer graduates who became teachers in PGSD receiving DIA. These findings indicate the consistency of PGSD or other educational programs in maintaining their graduates to become teachers, whether they were recipients of DIA or not.

Another aspect that needs to be seen in the effort to increase the quality assurance of graduates is the number of graduates who do not become teachers as shown in Table 6. In this aspect, the variation at the study program level (85%) was much greater than the variation at the time level (6%),

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while there was no variation at the university level. This illustrates that the difference in the number of graduates who did not become teachers between one study program with other study programs was very large.

The second model was the time model, which was used to test the significance of changes from year to year. Intercept in the fixed part of the time model explains that at the beginning of measurement (2009), the average number of graduates who did not become teachers was 13,086. The coefficient time in fixed parts in this model shows a significant decrease every year of 1,202 and it is in line with expectations. In other words, every year there is a significant decrease in the number of graduates who do not become teachers.

	Empty		Tim	e	PGS	D
	Coeff	SE	Coeff	SE	Coeff	SE
Fixed Part						
Intercept	10.082**	3.051	13.086**	3.279	6.121	4.034
Time			-1.202*	0.481	-1.202*	0.481
PGSD Non-DIA					-1.817	7.701
Partner					6.629	5.213
Non-Education					45.571**	8.391
Random Part						
Level: University						
Intercept	0	о	0	0	0	0
Level: Study program						
Intercept	378.125	85.309	378.725	85.308	210.229	48.549
Level: Time					-	
Intercept	50.971	6.422	48.565	6.119	48.565	6.119
-		-		-		-
-2*loglikelihood:	1280.997		1274.904		1251.215	
Decrease in deviance			6.093**		23.689**	
Variance explained by the m	nodel		0.00		0.39	

Table 6. Multilevel Analysis of Graduates Who Are Not Teachers

Note: * *p* <=.05, ** *p* <= .01

Relating to the impact of the DIA program, the results of the analysis on the last model tested show that PGSD did not have a significant difference in the number of graduates who did not become teachers with the non-DIA PGSD group and partners. On the contrary, non-educational programs have a much larger number of graduates who did not become teachers compared to PGSD receiving DIA. This is strongly reasonable and as expected because non-educational programs are not intended to produce graduates as teachers.

5. Discussion

The big question answered in this study is the impact of the provision of DIA on the quality of LPTK management. Multilevel modeling analysis followed with interviews was conducted to find out how far the DIA intervention improved the quality of management and its sustainability. In addition, the provision of DIA to LPTK has an impact on improving the quality of LPTK management, especially in increasing the number of certified lecturers, lecturers conducting research, and the number of graduates pursuing the teaching profession. In addition to these three aspects, the impact of DIA incentive funding is only seen when the PGSD group receiving the DIA (experimental group) compared to the partner group and the non-educational group. When compared to PGSD non-DIA (control group), the impact was lost, meaning that when compared to PGSD non-DIA, the DIA recipient was not better. This might be due to the lack of program priorities in the PGSD receiving

the DIA so that a lot of resources spent were less focused and not optimal because they had to be divided into many programs.

6. Conclusion

There has been an improvement in the quality of management in certain aspects relating to the DIA MUTU program. In the future, the intervention program should focus on certain aspects, so that the impact is felt on the intended aspects. The impact of DIA interventions is less biting because of too wide reach (9 aspects of management), resulting in a focal variation between recipient LPTKs. Based on the results of interviews, no LPTK strategies have been found to maintain or improve the minimum position as it is now if the intervention program ends. These conditions indicate that the level of sustainability of the program is threatened, especially for LPTKs which cannot independently continue to achieve their positions. The issue of self-sustainability needs to be raised, among others, LPTK's efforts to maintain or improve the quality of management even though DIA MUTU's assistance has been completed. The first policy option, introducing an institutional loan scheme, is to enable an LPTK to improve the quality of its management. The consequences of this policy do not exist for the government, because the government actually gives LPTK the freedom to develop independently. The second policy option is to form a network among the LPTKs that obtain DIA BERMUTU which needs to be guided or coordinated by the Directorate of Institutional Directorate General of Higher Education. The third policy option, pioneering academic journals managed by LPTK receiving DIA MUTU, will be beneficial in addition to professional development, a means of cooperation, and sharing lessons learned with each other. In this case, there are almost no consequences for the government on the second and third policy choices.

7. Author's Contributions

All authors contributed to the design and implementation of the study, worked out the results analysis, discussed and wrote the manuscript to the final version.

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