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# ATTAINING THE EQUITABLE DISTRIBUTION OF TEACHERS IN UNDERDEVELOPED REGIONS AT WEST KALIMANTAN PROVINCE

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#### Abstract

This study aims at describing the distribution conditions of teachers and principals in underdeveloped regions, examine the impact of distribution conditions to the students partisipation number in education, and identifying the root causes of inequitable distribution to attaining the equitable distribution of teachers. The researchers used the data collected for junior high school students in underdeveloped regions at West Kalimantan Province. The data obtained from Data Center of Education and Culture Statistics, Ministry of Education and Culture Republic of Indonesia in 2016. The findings proved that inequitable distribution of teachers in underdeveloped regions is still happen. It can considered has negative impact to students partisipation number of education. Therefore, requires synergy of roles of principals, district leaders and state leaders to solve it. Overall, this study provides critiques and suggestions to complete the strategic actions in attaining the equitable distributions of teachers in underdeveloped regions at West Kalimantan Province, Indonesia.

Keywords: Equitable Distribution, Teachers, Underdeveloped Regions

#### INTRODUCTION

The education service for all is one of the Millennium Development Goals (MDGs) aimed at improving the quality of education in Indonesia. However, serious issues related to educators remain unresolved, such as teacher shortage, unequal distribution of teachers, poor quality of teachers and a lack of attention to teachers' welfare (Basics, 2014). The main problems of education related to the distribution of teachera are obviously felt in various regions, especially in the underdeveloped regions in Indonesia.

Indonesia's geographic characteristic makes the distribution of teachers between regions in Indonesia are unequal (USAID, 2014). Geographically, Indonesia has a variety of difficult terrain that is known as underdeveloped regions. In Presidential Regulation Number 131 of 2015 about Determination of Underdeveloped Regions, there are 122 districts of 24 provinces in Indonesia defined as underdeveloped regions in 2015-2019. Providers of education in underdeveloped regions face complexity from problems of providing educators and quality of education (Wijayanti & Sutapa, 2015). It has led to widespread access and equity in obtaining education services in underdeveloped regions has not been achieved to date.

Generally, underdeveloped regions are characterized by relatively remote geographical locations, or areas that are poor in natural resources, or prone to natural disasters and relatively less developed than other regions on a national scale (Bappenas, 2004). For that, the State Ministry for the Development of Underdeveloped Regions, Indonesian Republic defines underdeveloped regions as relatively less developed districts compared to other regions on a national scale, and relatively lagging populations.

The inequitable distribution of teachers in underdeveloped regions is due to the condition of the teachers' deficiency and advantages among regions. Teacher shortage is a condition where the number of teachers is less than required, otherwise the advantages of teachers is a condition where the number of teachers is more than needed (Wadesango, et.al, 2012). The condition of the teacher's deficiency and advantages is a direct impact of to the unequitable distribution of teachers.

Unequitable distribution of teachers in underdeveloped regions is not a simple matter. A total of 66% of schools in underdeveloped regions in Indonesia experience a condition of teacher shortage (Basics, 2014). Various policies have been made by the government to solve the problem. One of them is the arrangement of teachers who have status as Civil Servant. The arrangement of civil servant teachers is the process of rearranging for the ratio, academic qualification, distribution and composition of civil servant teachers in accordance with the real needs of each educational unit (Silberstein & Peretz, 1987; Aloo, et.al, 2011).

More specifically, at the Junior High School level as the main data that will be discussed in this article shows a surprising fact. The ratio of teacher-student numbers in Indonesia according to a report from the Directorate of Education and Training Development of the PMPTK Directorate General, quoting from Edstats Database (2006), stated the ratio at the junior high school level of 14.2. That is, at the junior level each teacher serves 14.2 students or ratio 1:14. In fact, the provisions of Standard Process Number 41 of 2007, for junior high school is allowed up to 1:32 ratio. These data indicate the existence of excessive number of teachers in some regions in Indonesia. The excess ratio in the number of teacher-students is irrelevant to the condition of teacher shortages occurring in underdeveloped regions in Indonesia. This reinforces the fact that the unequitable distribution of teachers in Indonesia is still happen.

If the government makes efforts to structuring civil servant teachers to realize the equitable distribution of teachers, various public figures or organizations also participate in becoming part of solving this problem. Some programs such as Indonesia Mengajar by Anies Baswedan, Sekolah Guru Indinesia by Dompet Duafa, Guru Penggerak Mengajar by University of Gadjah Mada and many other programs. The effectiveness of program implementation is of course various, but in essence the various programs of course help to realize the distribution of teacher distribution in remote areas from Sabang to Merauke, from Miangas to Rote. The effectiveness of the implementation of the program is various, but in essence the various programs have helped to realize the distribution of teachers in Indonesian underdeveloped regions.

However, a permanent solution is needed to ensure teachers' needs in the underdeveloped regions. In the current era of regional autonomy, local governments play an important role. This is in line with that disclosed by Bappenas (2004) that the development of underdeveloped regions must to be adapted to the needs and characteristics of each. For that reason, the best permanent solution is provided by the local government's solute policy.

This research is expected to be one of the studies that is solutive for the government regarding the condition of teacher distribution in underdeveloped regions, especially for the government of West Kalimantan Province. The study was conducted at the junior high school level with three main objectives: (1) describing the distribution conditions of teachers and principals in underdeveloped regions, (2) examining the impact of distribution conditions to the students partisipation number in education, and (3) identifying the root causes of inequitable distribution to attaining the equitable distribution of teachers.

There are 8 districts defined as underdeveloped regions in West Kalimantan Province, that is (1) Sambas District, (2) Bengkayang District, (3) Landak District, (4) Ketapang

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District, (5) Sintang District, (6) Kapuas Hulu District, (7) Melawi District dan (8) Kayong Utara District (Peraturan Presiden Nomor 131 Tahun 2015). West Kalimantan Province is the province with the most underdeveloped regions in Kalimantan Island.

This study is an empirical study (expost facto) that is research related to fact that has happened so that no need to provide treatment and conducted to find the factors causing the occurrence through the data obtained (Sukardi, 2004; Sugiyono, 2008). The data in this study sourced from the Basic Data of Education which is a publication of the Education and Statistics Data Center of Education, Ministry of Education and Culture, Republic of Indonesia in 2016.

The results of data analysis are used to provide an overview of the condition of inequality in the distribution of teachers across the underdeveloped regions in West Kalimantan Province. Then, to outline the strategic steps in attaining the equitable distribution of teachers in underdeveloped regions, especially in West Kalimantan Province. Solving the inequitable distribution of teachers is not impossible, but it will ultimately require investment policies that promote strategic resources equalization and leverage investments in the quality of personnel (Adamson & Hammond, 2011; Aloo, et.al, 2011). So, with such investments, it is possible to attaining the equitable distribution of teachers in underdeveloped regions at West Kalimantan Province, Indonesia.

#### **METHOD**

This research is an expost facto research type (empirical study) in 2016. The data in this study sourced from the from the Basic Data of Education in a book entitled "Analysis of the Distribution of Teachers in Region 3T, Overview of Junior High School Year 2016" which is the publication of the Center Data of Education and Culture Statistics, Ministry of Education and Culture, Republic of Indonesia in 2016. The data obtained is processed in the form of tables or figures and analyzed descriptively by the researcher.

The population in this study is the junior high school in underdeveloped regions at West Kalimantan Province. The sampling technique used is population sampling. So that the sample obtained is all junior high school in underdeveloped regions at West Kalimantan Province amounted to 8 (eight) districts.

## FINDINGS AND DISCUSSION

The findings in this study will be divided into three main subjects: (1) general description, (2) distribution of teachers and principals and (3) student participation rates in education. The three sub-sections will present data on the results of the processed researchers sourced from Basic Data of Education on the distribution of Junior High School teachers in 2016.

#### **General Description**

The general description of the distribution of Junior High School teachers in underdeveloped regions at West Kalimantan Province by calculating the Minimum Teacher Needs (MTNs). This calculation is so simple that it can not be used as a benchmark in determining the condition of the shortcomings and advantages of teachers in an area. The MTNs calculation results only to give an overview of the condition of teacher availability in an region.

Referring to the Technical Guidance on the Implementation of Joint Regulation on the Arrangement and Equalization of civil servant teachers, the calculation is based on the minimum teacher needs of junior high school teachers as many as 10 people plus

counseling teachers as much as 1 person. So that the minimum number of teachers need junior high school by one school at least amounted to 11 people. This amount has not been calculated based on grade (class VII, VIII and IX) because the number of students is unknown. So it only shows a simple calculation to describe the condition of the minimum teacher needs that should be met. The results are presented in the table as follows:

Table 1. The Calculation Results of Minimum Teacher Needs (MTNs) in Junior High School in Underdeveloped Regions at West Kalimantan Province

No	District	School	MTNs	Teachers	Result
1	Sambas	116	1276	1.460	184
2	Bengkayang	75	825	808	-17
3	Sintang	109	1199	1.258	59
4	Kapuas Hulu	94	1034	899	-135
5	Landak	98	1078	1.143	65
6	Ketapang	126	1386	1.309	-77
7	Melawi	103	1133	765	-368
8	Kayong Utara	37	407	390	-17
	_	758	8338	8032	-306

Column of the result shown in Table 1 with a negative (-) sign indicates that the district is in a condition unable to meet the minimum teacher needs required by each school. While the results of calculations with a positive sign (+), indicating that the district is able to meet the needs of teachers at least but does not mean indicate that the district is suffering conditions of sufficiency or excess teachers. This is because the calculation does not refer to the needs per rombel because it is not known the number of students in each district.

Table 1 shows that there are five districts experiencing a condition that can not meet the minimum teacher needs at the junior high school level, namely (1) Bengkayang Regency, (2) Kapuas Hulu District, (3) Ketapang District, (4) Melawi District, 5) Kayong Utara District. Melawi District shows the highest gap in teacher needs fulfillment.

### **Distribution of Teachers and Principals**

Description of the distribution of teachers and principals will be presented in the form of drawings and analyzed descriptively. In this section there are five components that will be discussed to give a clear picture of the distribution of teachers and principals, namely (1) teacher ratio per school, (2) student ratio per teacher, (3) percentage of worthy teacher, (4) principal ratio per school, and (5) percentage of worthy principals.

### Teacher Ratio per School

The ratio of teachers per school is the total number of teachers divided by the number of schools. The higher the ratio rate, more teachers there are in school. The national standard for teacher ratio per school at Junior High School level is 18.41%.

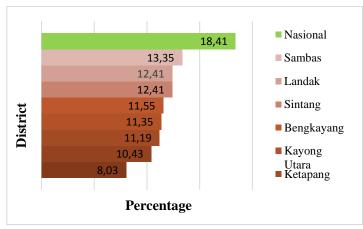


Figure 1. Teacher Ratio per School

Figure 1 shows that all districts are below the national standard teacher ratio per school. That is, the number of junior high school teachers in the eight districts belonging to disadvantaged areas in West Kalimantan Province does not meet the national standards of the number of teachers to be met. With the lowest ratio With the lowest student ratio per teacher is Melawi Regency at 8.03%.

# Student Ratio per Teacher

Ratio of Students per Teacher is the total number of students divided by the number of teachers. The higher the ratio the more students are served by one teacher. The national standard ratio of students per teacher at junior high is 14.73.

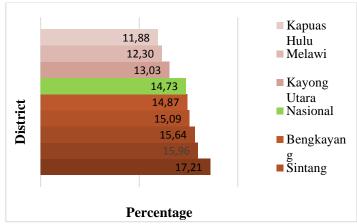


Figure 2. Student Ratio per Teacher

Figure 2 shows that there are five districts in West Kalimantan Province that are below the national standard ratio of students per teacher in junior high school. The five districts are: (1) Bengkayang Regency, (2) Sintang District, (3) Ketapang District, (4) Sambas District, (5) Landak District. That is, one junior high school teacher in the five districts served a larger number of students than the ratio set to national standards. With the highest ratio of student per teacher that is Regency of Landak 17,21%.

### Percentage of Worthy Teacher

Teachers who teach in junior high school must meet certain qualifications or called teaching eligibility in accordance with applicable regulations. One of the required qualifications is academic qualification. According to Law Number 14 Year 2005, the

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academic qualification to become a junior high school teacher is a graduate degree (S-1) or diploma four (D-IV).

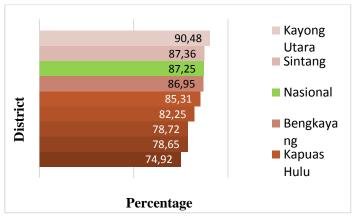


Figure 3. Percentage of Worthy Teacher

Figure 3 shows that the percentage of teachers eligible in all of the underdeveloped areas in West Kalimantan Province has not reached one hundred percent. That is, not all junior high school teachers meet the qualification of the feasibility of teaching in the form of academic qualification that is certified S-1 / D-IV.

However, when it is associated with national standards where the percentage of appropriate teachers is set at 87, 25%, then there are six districts that are below standard. The six districts are (1) Kabupaten Bengkayang Regency, (2) Kapuas Hulu District, (3) Sambas Regency, (4) Melawi District, (5) Ketapang District, (6) Landak District. With the lowest percentage of teachers deserving the lowest Landak Regency is 74.62%.

## Principal Ratio per School

The ratio of principals per school is the ratio between the number of schools and the number of school principals. This ratio can be used to describe how many schools do not have a principal. The ideal rate as well as the national standard ratio of principals per school at junior level is 100%. This means that every junior high school must have 1 principal. If it is less than that standard, it indicates that there is still a Junior High School who does not have a principal yet.

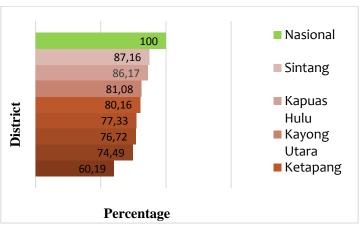


Figure 4. Principal Ratio per School

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Figure 4 shows that the ratio of school principals per school across the disadvantaged areas of West Kalimantan Province, has not reached one hundred percent. This indicates that there are still schools that do not have a principal. That is, there is still a junior high school that does not have a principal in the eight districts belonging to disadvantaged areas of West Kalimantan Province With the ratio of the lowest principals per school that is Melawi regency of 60.19%.

### Percentage of Worthy Teacher

The principal is a teacher who is given the additional task to lead a school organized learning process or where interaction occurs between the teacher giving the lesson and the student receiving the lesson. Principal in junior high school must meet certain qualifications or called the eligibility of the principal in accordance with applicable regulations. One of the qualifications required is academic qualification.

In an effort to improve the quality of education, Kemendikbud has issued the Minimum Service Standards of Primary Education which contains among others is every district is all junior high school principals are academically qualified as S-1 or D-IV and have certified educators.

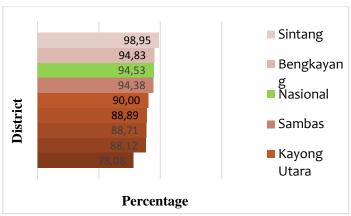


Figure 5. Percentage of Worthy Teacher

Figure 5 shows that the percentage of school principals eligible in all underdeveloped areas in West Kalimantan Province has not reached one hundred percent. This shows that the eight districts still have schools where the principal is in an inappropriate category according to the applicable regulations. However, when it is associated with national standards where the percentage of school principals is eligible to be set at 94, 53%, then there are six districts below the national standard of percentage of eligible principals. The six districts are (1) Sambas District (2) Kayong Utara District, (3) Kapuas Hulu Regency, (4) Melawi District, (5) Ketapang District, (6) Landak District. With the lowest percentage of the lowest eligible principals of Landak District is 78.08%.

## The Number of Student Paricipation in Education

Based on the gross enrollment rate of the eight disadvantaged areas in West Kalimantan Province, the figure is above the 96% percentage. This indicates that 96% of the population aged 13-15 years have attended junior high school. When compared to the national standard of gross enrollment rates, there are seven districts that are still below standard and only one district is above the standard of Kapuas Hulu District. Nevertheless, these results are excellent for demonstrating that students' wishes to go to junior high school are excellent and fairly high. However, the high rate of student enrollment for school should be balanced with the provision of teachers. For that, the next step is to identify the number of student participation in education.

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### The Number of Repeat Student

The number of repeat student is the ratio between the number of students repeating to the number of students and expressed as a percentage. Ideally, it is 0.00 percent and the lower the value, the better.

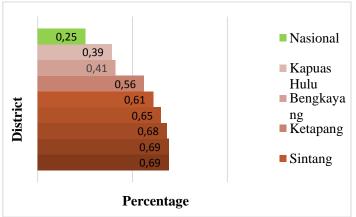


Figure 6. The Number of Repeat Student

Figure 6 shows that the number of students repeating in all the underdeveloped areas in West Kalimantan Province has not reached the ideal figure of 0.00. This indicates that the eight districts still have repeat students. When associated with the national standard where the repeat student rate is set at 0.25%, then the entire left behind area in West Kalimantan Province is below standard. With the highest repeat number of students that is Melawi Regency of 0.69%.

To examine the impact, the analysis was conducted by looking at the condition of the distribution of teachers and principals with the number of repeat junior high school students in disadvantaged areas of West Kalimantan Province. Based on the data presented in graph 7, Kabupaten Melawi is the district with the highest repeating rate compared to other underdeveloped regions. When viewed from the ratio of teachers per school, Melawi Regency also shows the lowest ratio. In addition, the ratio of school principals per school in Melawi District is also the lowest. This indicates that the number of teachers in one school and the principal impacts the number of students repeating.

Furthermore, it is seen on graph 6 that Landak District is the district with the third highest repeat rate compared to other disadvantaged areas in the Province of West Kalimantan. When viewed from the ratio of students per teacher, Landak District is also the region with the lowest ratio. In addition, the percentage of teachers eligible in Landak District also shows the lowest percentage compared to other regions. This indicates that the number of students served by a teacher and the percentage of existing decent teachers will have an impact on student repetition rates.

# The Number of Dropout Student

The number of dropout student is the ratio between the number of students who dropped out of the school system before obtaining a diploma with the number of students and expressed as a percentage. Ideally, it is 0.00 percent and the lower the value, the better.

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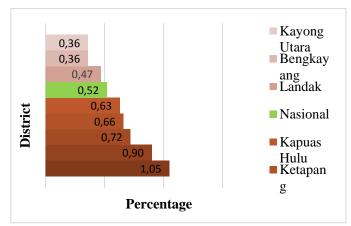


Figure 7. The Number of Repeat Student

Figure 7 shows that the dropout rate of students across the disadvantaged areas in West Kalimantan Province has not reached the ideal figure of 0.00. This shows that the eight districts still have students dropping out of school. If it is related to the national standard where the repeat student score is set at 0.25%, then there are five districts that are below the standard namely, (1) Kapuas Hulu District, (2) Ketapang District, (3) Sambas District, (4) Kabupaten Sintang and (5) Melawi District. With the highest repeat number of students is Melawi Regency of 1.05%.

Melawi district is the highest dropout rate compared to other disadvantaged areas in West Kalimantan Province. The same results are also shown in graph 7 where repeat rates in Melawi District are also the highest. To that end, the local government needs to address this issue immediately so that the education development in Melawi Regency will improve. While Kayong Utara District which is at the lowest dropout rate compared to eight other underdeveloped areas, shows the second highest repeat rate. This indicates that repeat numbers and drop-out rates are both different components.

### The Root Causes of Inequitable Distribution of Teachers

The problem of unequal distribution of teachers is not a simple matter. In the current era of regional autonomy, local governments have an important role in realizing the distribution of distribution of teachers in the region (Makori & Onderi, 2013). Many factors have contributed to inequality of teacher distribution in disadvantaged areas. At least there are three main factors that have the most influence on teacher distribution policy that is, (1) lack of regulation of teacher placement and distribution in the strong legal form, (2) weakness of education information data system, (3) weak supervision and law enforcement (Kemendikbud, 2016: 87). These three problems are the root causes of the inequality of teacher distribution.

# Lack off Regulation of Teacher Placement and Distribution in the Strong Legal Form

Regulation of teacher placement and distribution is a legal umbrella for the local government in regulating teacher placement and transfer. Almost all regencies in Indonesia do not seem to have a local regulation and or at least a Regent's Regulation which gives legal force to heads of departments to assign teachers and to educate teachers (Kemendikbud, 2016). To that end, local governments should have local regulations governing the distribution of teachers.

The social, geographical and economic conditions that each region possesses must be different. To that end, the innovations of various policies undertaken should be tailored to their respective regions. As in West Kalimantan Province, various programs related to

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distribution equity distribution of teachers have been done. As one example in Landak District, the Non-Permanent Teachers program conducted in 2017 has its own innovation. The Non-Permanent Teachers who are recruited are students who have completed their education through the Regional Delegates Scholarship (BUD) according to the agreement assigned to schools of teacher shortage (Regent Landak, 2017). Local governments must establish their role in the current era of regional autonomy. The solution of the problem in the region is to return to their respective regions, the community together with the local government must work together to solve the problem. Innovations in education need to be done by playing the role of the local youth.

### Weak Data System of Education Information

Teachers' data from all provinces in Indonesia indicate that there are advantages and disadvantages of teachers in education units, in districts and provinces that are also supplemented by the transfer of teachers (Kemendikbud, 2016). Most districts do not have an effective teacher management system to carefully analyze the shortcomings and advantages of teachers in each educational unit. The Office of Education tends to pay more attention to the shortage of teachers than the teachers' surplus (USAID, 2014). The gap faced in the distribution of teachers requires a good educational information system.

Structuring and distribution of teachers can be done if the local government has done the needs planning and analysis of teacher optimization at the level of education units and the provincial or district or city level (Behrstrock & Clifford, 2010; Partee, 2014). District governments should analyze teacher needs and data collection of teachers at each level of education and provide a map of teachers informing teachers about distribution to enable them to know which areas are experiencing the advantages or disadvantages of teachers (Basics, 2014; Partee: 2014). To that end, each region must have a system of educational information data each containing data distribution of teachers in each region. The main function of this data system can be made the central government of each province to take policy on teacher distribution.

### Weak Supervision and Law Inforcement

To overcome the distribution problem faced by almost all regions in Indonesia, the government has issued a Joint Decree of 5 Ministers in October 2011. Agreement between the Minister of National Education, Minister of Administrative Reform and Bureaucracy Reform, Minister of Home Affairs, Minister of Finance and Minister Religion, intended for the implementation of the improvement and distribution of the quality of education nationally and the achievement of national education goals (Peraturan Bersama 5 Menteri). The joint regulation provides for civil servant teachers (PNS) to be transferred to education units in districts and other provinces (Kemendikbud, 2016: 87). A policy that does not have effective oversight will be difficult to measure. For that, there needs to be a strong supervision related to the distribution of teacher distribution in disadvantaged areas.

### **CONCLUSION**

The distribution of teachers and principals in the eight underdeveloped regions at West Kalimantan Province was analyzed based on statistical data covering several components such as: teacher to teacher ratio, pupil per teacher ratio, percentage of teachers eligible, school principal ratio per school, and percentage of school principals eligible. The result of data analysis that has been done proves that lagging area in West Kalimantan Province still experience inequality of teacher distribution.

The impact of inequality is one of the main causes of student enrollment rates in education. The gross enrollment rate indicates that at least 96% of the population aged 13-15 years in the eight disadvantaged areas of West Kalimantan Province attend school. That is, the level of awareness of junior high school students is quite high. However, inequality in teacher distribution shows a negative impact on repeat rates and student dropouts in disadvantaged areas that are still quite alarming.

To overcome this, local governments have an important role in realizing the distribution of distribution of teachers in the region. Strengthening the role of local government in the era of regional autonomy requires synergy with the central government. Many factors have contributed to inequality of teacher distribution in disadvantaged areas. At least there are three main factors that have the most influence on teacher distribution policy that is, (1) lack of regulation of teacher placement and distribution in the form of strong legal umbrella, (2) weakness of education information data system, (3) weak supervision and law enforcement (Kemendikbud, 2016). These three problems are the root cause of the inequality of distribution of teachers to be overcome in order to achieve equitable distribution of teachers in disadvantaged areas, especially in West Kalimantan Province.

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