Teachers' Structuring and Equating Policy Analysis of Special Regions in Indonesia

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Abstract—Education is one of the goals of the establishment of the Indonesian nation as stated in the 1945 Constitution: to educate the entire life of the nation. However, this adequate teachers-students ratios does not occur evenly across the country. One of the most fundamental problems is the unequal distribution of teachers in some areas that are far from urban areas, especially in special areas: disadvantage, remote, and border areas. To resolve the problems, the government through Ministry of Education and Culture formulating a teachers structuring and equalizing policy program. This research was conducted by using descriptive qualitative explanatory research approach to assess the implementation of it. The purpose of this study is to find the pictures and information of the teachers structuring and equalization in special region program, the implementation and the support factors and the obstacles of the program implementation.

Keywords—teachers’ structuring; descriptive qualitative explanatory

I. INTRODUCTION

One of the goals of the establishment of the Indonesian nation in education as stated in the 1945 Constitution is to educate the entire life of the nation. The article 31 of the Constitution states that every citizen shall have the right to education. It is not only entitled it, the government even requires the citizens to get basic education and the government is obliged to finance it. This is further reaffirmed in National Education System Act of 2003, in Article 5 paragraph 2 it is said that; every citizen has the same right to obtain quality education. In addition to Article 6, paragraph 1 of the same act also states that the government and regional governments shall provide services and facilities to ensure the implementation of quality education for every citizen without discrimination.

Currently, as seen in table 1, the number of teachers throughout Indonesia is 3.015.315 people, consisting of teachers from various levels of schools, from kindergarten to high school teachers, and also consisting of various statuses; Civil Servants Teacher (CS), Private School Permanent Teachers (PT), Private School Non-Permanent Teachers (NPT), Regional Part Time Teacher in State Schools (RPT), and Part Time Non-Tenure Teacher (PT-NT).

This number of teachers in Indonesia is rationally considered adequate. According to UNESCO's Global Monitoring Report in 2011, the ratio of teachers and students in Indonesia is around 1:16. This ratio is smaller than the ratio of teachers and students in some countries like Brazil (1:22), Japan (1:21), and Korea (1:18) [3]. It also said that the ratio of teachers and students in Indonesia annually decreased.

However, this adequate teachers-students ratios does not occur evenly across the country. One of the most fundamental problems is the unequal distribution of teachers in some area that are far from urban areas, especially areas that state as the Special Region which are located in the disadvantage, remote, and border region. This become the state of the art of why the research needs to be done.

Based on observations, one of the problems of teacher distribution caused by the geographical contour which in general causes some difficulties to reach and give treatments, such as in mountainous, valleys, coastal, or island areas. These conditions generally make teachers reluctant to be placed and do their duty to teaching in these areas for long time. The transportation modes and living facilities (especially the needs of clothing and boards) are very limited in this area. Therefore, many teachers tend to devote themselves to the area they find comfortable. Furthermore, in urban areas, according to USAID- Institutions research in 2014 found that teacher inequalities among schools also often occur due to the placement and arrangement of teachers that are more based on political considerations than the needs of schools [4]. In addition, there is stigma that has been attached to the public’s assumption that the transfer of teachers to remote areas is seen

| TABLE I. THE NUMBER OF TEACHERS IN INDONESIA BASED ON ITS STATUSES AND LEVELS [1, 2] |
|LEVEL/STATUS| KG| ELEM| JHS| HS| TVS| IS| TOTAL |
|---|---|---|---|---|---|---|---|
|CS| 51.51 | 990.18 | 355.30 | 188.01 | 93.38 | 7.95 | 1.677.365 |
|FT| 181.013 | 111.718 | 99.066 | 48.819 | 77.631 | 5.224 | 523.471 |
|NPT| 40.610 | 470.438 | 112.089 | 44.025 | 48.441 | 1.654 | 717.257 |
|RPT| 6.590 | 56.561 | 16.475 | 6.676 | 5.307 | 596 | 91.963 |
|PT-NT| 907 | 2.241 | 701 | 579 | 773 | 58 | 5.259 |
|TOTAL| 242.471 | 1.060.138 | 588.115 | 268.115 | 225.470 | 15.287 | 3.015.315 |
as "exile punishment". Teachers' mutation are considered not as government efforts to level the teachers' needs, but as a threat to CS teachers who have different political views or who are perceived to oppose the policies of local high rank officials.

According to the research USAID, it is said that the low of teacher-student ratio, especially at the primary school level, does not necessarily mean that all schools have the required number of teachers. In fact there are still many schools that lack of teachers, especially in remote, border, and disadvantage areas. Most of that regions do not have an effective teacher management system to carefully analyze the lack or surplus of teachers in each educational unit. The Local Education Office tends to pay more attention to the teacher's shortcomings rather than the excessive of them.

Teacher inequality has a negative impact on two things. First, public services in schools with few of teachers could not maximally running because during learning time many classes are left empty without studying activities, the criteria of teaching completeness is not achieved, and finally the students' competence is become low. Secondly, teachers who work in schools with excessive teachers become unproductive and cannot meet the number of teaching hours in accordance with the rules of 24 teaching hours per week. This situation causes a loss to them because it affects the teacher career development, such as the fulfillment of certification requirements and promotion that requires the fulfillment of teaching hours.

Meanwhile, there are two related aspects to the situation that require further exploration, they are the recruitment and the distribution of teachers. In the decentralization era, the responsibility for teachers' recruitment becomes the district/city government affairs and the central government has the authority to set the quota for the civil servant teachers. The quotas for civil servant teachers at all levels continue to increase and lead to an increasing number especially at the primary school level. Most of the teachers increasing is due to the status change of the honorary into a civil servant teacher. Logically, this will cause a decrease in the number of non-civil servant teachers. However, the reality in rural schools in the remote areas are still found many teachers who are still as unconfirmed/honorary teacher, both paid by the local government, as well as by the school itself.

Meanwhile, the delegation of teachers' management authority to local government has not been accompanied with capacity building for teacher management, particularly related to real needs analysis at every level and type of school. This is reflected in the fact that there are still many excessive areas of class teachers (seen from the ratio of teachers to the number of classes) at elementary level, and certain subject teachers at the junior and senior high school levels when viewed from the number of study groups and teacher teaching loads. While it can be assumed that the number of primary school-aged children continues to decline.

Based on the problems above, the researcher wanted to see how the implementation of the teacher structuring and equating policy in disadvantage, remote, and borderline area? And what kind of supporting and obstacle factors for it? The purpose of this research are to describe the government action in resolving the teachers' structuring and equating problem especially in disadvantage, remote, and borderline area.

II. RESEARCH METHOD

This study describes and analyzes The Frontline Teachers (TFT) Program implementation which was held by Ministry of Education and Culture in 2015 and 2016. The research itself is a descriptive qualitative explanatory research approach with secondary data analysis method. All data assessed from the ministry records and from other documents and articles.

III. LITERATURE REVIEW

Policy is an action taken to reach certain purposes. Policy is a political action or a set of a principles which taken to affect people’s behaviors. While, policy is a government option to do or not to do. The 'policy' word itself have 3 meanings: First, the policy is referring to the purposes of people affection; Second, the policy is related to information review and determination of suitable action; Third, is related to pacification and resources commitment.

The public conceptual of a set of a public policy have 3 connotation, they are: the government, community, and general people. They are able to see from different dimension of subject, object, and the policy environment itself. In subject dimension, the public policy is a government policy or considered also as an official action. In the environmental dimension, public means the people society. Therefore, the decision considered as policy if the scope of the action have affect many people from various communities. In line with it, the public policy referred to all government action areas which stretched from economy policy up to the policy which directed to rubric pattern including education, healthiness, and other welfare areas.

The policy analysis is an intellectual and practical activity which intended to create, to assess critically, and to communicate the knowledge of policy process. Meanwhile, policy analysis is a set of process to produce a policy using human understanding or opinion to resolving the policy problems. The policy define as a program to reach the goals, values, and directed practices.

The public policy itself is the result of political system. This describes in the definition of Rawit, which stated that the public policy can define as a relationship of the government unit to its environment. The definition above strengthened by Dye which stated that the public policy is whatever the government chooses, what the government does, why the government takes the action and what the consequences of the action are if done or not done. While Santoso, categorized it in 2 categories. First, all government actions are public policy. Second, public policy is a government decision that has a specific purpose and intention and has a predictable effect.

The education policy concept is a considerations based on the value system and some assessments of situational factors. The considerations is used as a basis for operating an institutionalized education. These considerations are general plans that serve as guidelines for making decisions so that institutional goals can be achieved. Meanwhile, according an
education policy in schools is made by the elected person who responsible for making educational policies, school boards and other elements who authorized to make policies, principals, supervisors or administrators who have the authority to manage the policies of the school council.

Nugroho formulate the meaning or limitations of education policy that “education policy is the whole process from the results of the formulation of educational strategic steps outlined from the vision and mission of education, in order to realize the achievement of educational goals in a society for a certain period of time” [13]. Education policy is examined in relation to the ethics and reality of educational action as a process of empowering learners. Since education is a praxis science which means the theory and practice in unity, the education policy lies in the normative order and the descriptive order.

The education policy according to Tilaar and Nugroho (2012) can be identified based on the aspects contained as described: (1). Entire deliberation of human nature, (2). Born as a praxis science; is the unity between the theory and practice of education, (3). Have validity in personal and community development, (4). Openness, (5). Supported by research and development, (6). Policy analysis, (7). Addressed to the needs of learners, (8). Directed to form a democratic society, (9). Associated with the translation of the mission of education in the achievement of certain goals, (10). Based on efficiency, (11). Not based on power but to the needs of learners, (12). Not based on irrational intuition or policy.

In the practice of the nation and state life, the education policy is an important consideration. It is because of the rigid educational policy with the future of the country concerned, especially in the complex and competitive world social order. As Rawita (2013), education policy is the key to excellence, even the existence of countries in global competition, so that education policy needs to get to the top priority in the era of globalization. Education policy is a part of public policy in addition to other policies such as the economy, the military in social, foreign affair, and so forth. Here it becomes clear that politics is increasingly entering the realm of education and because of political life is essentially a collection of power, education becomes so easy to be a practical political tool or vehicle.

IV. RESULT AND DISCUSSION

A. Teachers Restructurisation and Equalization Policy in Indonesia’s Law Framework

There are several laws and regulations that underlie teacher structuring and equity, they are: National Education System Act of 2003, Teachers and Lecturers Act of 2005, Teachers Regulations of 2008, the Recruitment, Mutation, and Dismissal Authority of Civil Servant Regulation of 2003, National Education Standard Regulation of 2005, and Joint Decree of 5 Ministers (Minister of Education and Culture, Minister of Administrative and Bureaucracy Reform, Minister of Home Affairs, Minister of Finance, and Minister of Religion) in 2011 about Restructuring and Equalization of Civil Servant Teacher.

National Education System Act of 2003, stipulates that the National Education Standards are the minimum criteria on the education system throughout the jurisdiction of the Republik Indonesia, it also stipulate that the National Education Standard Regulation of 2005 have to synchronize with the dynamics of local, national, and global development. In order to realize the function and purpose of national education then the government has published the newest government regulation of National Education Standard Amendments Regulations of 2013. As for the explanation of it, as follows: Improving the quality and competitiveness of Indonesian human resources resulting from education has become a national commitment.

The relevance of the National Standard of Education (NSE) with the distribution of teachers proportionally to reference at the level of educational units, especially at the level of school management to plan the development of the quality of educators and education personnel in supporting the implementation of 8 national education standard. At the level of school management, the initial program undertaken is conducting school self-evaluation (EDS) where at the end of the activity will lead to recommendation related to the direction of school development policy. School Self-evaluation developed from eight national education standard instruments which contains a holistic achievement of the applicable educational standards in Indonesia. The NSE contains of eight standards which is a guide for Educators and Education Personnel to develop the ability and shape the character and civilization of a dignified nation in order to educate the life of the nation, these standards are: Standard of Graduate Competency, Standard of Content, Standard of Processes, Standards of Educators and Education Personnel, Standard of Facilities and Infrastructure, Standard of Education Management, Standard of Education Financing, and Standard of Education Assessment.

To ensure the achievement of education quality held by the government, Minister of Education and Culture has set the minimum service standards (MSS) for Basic Education, as outlined in the form of regulation. Based on Ministry of National Education Decree of 2001 state that this national minimum standard in education is the benchmark of education service performance or reference for the provision of education in provinces and districts / cities as autonomous regions.

The forming of MSS in Primary and Secondary Education refers to the Central Government Authority and the Provinces Government Authority as Autonomous Regions Regulations of 2000 implies the right and authority of the central government to make policies on national planning and national standardization.

The relevance of structuring and equalization of the teacher distribution can be reflected in several indicators of SNE and MSS. In the MSS, there is a standard of the educators and education personnel that can be used as a reference and in the education implementation, the type of services of them seen in indicators as follows:

- In each elementary school level, the availability of 1 teacher for every 32 students and 6 teachers for each educational unit or 4 teachers for each educational unit in special area is a must;
In each middle high school level, the availability of 1 teacher for every subject and 1 teacher for each clumps of the subject in special area is a must;

In each elementary level, the availability of 2 bachelor degree teachers and 2 certified teachers is a must;

In each middle high school level, the availability of 70% bachelor degree teachers and half of them (at least 35%) has certified is a must, except the ratio in the special area are 40% and 20%;

In each middle high school level, the availability of bachelor degree and certified teacher at least 1 teacher of each Math, Science, Bahasa Indonesia, and English subjects.

Afterward, the government have arranged the Joint Decree of 5 Minister to handling the restructuring and equalization of teachers. It is set on October 3, 2011. The joint regulation was issued as a guidelines in regulating the authority and task of each level of government in the process of teachers structuring and equalization. The decree was focused on two things: First, the assessment of teachers needs of each region; Second, the mutation of civil servant teachers in the same District/City, between District/City and Province. The policy was also sat the punishment for the local government who had not carry out this policy well. The punishment could formed as cessation of some or all financial aids by the Central government, did not get the civil servant teacher formation, and the delayed disbursement of regional financial balances.

Unfortunately, the regulation did not running and reach the maximal results. It is because some factors: According to Indonesian Corruption Watch research Alfiyah (2015), one of the problems is the unclearly regulation of teachers need assessment. Government should put the structuring and equalizing at the first line but oppositely the local government is only collecting data of teacher needs in order to fulfill the recruitment. It looks like the government ignored the equalizing process like regrouping system, switching function/level, duplicating class teacher, visit teacher and mutation. The other factor is the policy have unclearly indicators, whether the success indicator was measured by how many teachers who successfully moved or how small teacher needs in region or national scope.

B. The Analysis of Policy Implementation

The Frontline Teacher Program is a leading program that have been implemented 2 times in 2015 and 2016. This program is a government’s strategy and effort in equalizing the education access by increasing the availability of teachers in special areas (underdeveloped, remote, and borderline areas).

At the beginning of the implementation in 2015, the program has been selected and produced 798 candidate as frontline teachers which will be distributed to a 28 districts/cities included in special areas in four provinces: DI Aceh, Nusa Tenggara Timur, Papua, and Papua Barat. Meanwhile, in the implementation at 2016, the program has massively increasing the recruitment into 6,256 frontline teachers which will distribute into 32 Districts in 17 province of Indonesia.

In 2015, the TFT Teachers was inaugurated directly by the President of the Republic of Indonesia, Mr. Joko Widodo accompanied by the Minister of Education and Culture, Mr. Anis Baswedan; Minister of Administration and Bureaucracy Reform, Mr. Yuddy Chrisnandri, and some other high-ranking officials. At that time, the president expressed his greatest appreciation to the frontline teachers who have been willing to dedicate themselves to spread the education in a difficult and remote locations which have limited access of both transportation and communication (Kementerian Pendidikan dan Kebudayaan, 2015b).

According to the Director of Basic Education Teachers Development, Mrs. Poppy Dewi Puspitaswati, the TFT program was a priority program of current government. It is also as one of affirmation policy of Ministry of Education and Culture in embodying the third nawa cita (development vision of President Joko Widodo), i.e.: Developing the country from the borderland and strengthening the villages and suburbs area.

C. The Policy Formulation Process

The Frontline Teacher recruitment (TFT) is based on the educational need assessment of special area which based on the considerations of national interest and referred to government data on Dapodik (education data center). Furthermore, the proposal for recruitment formation submission through e-application development by the Ministry of Administration and Bureaucracy Reform. In case of many government agencies that have set specific criteria for the special region, then the implementation of the TFT program is used one of the criteria as reference which issued by Ministry of Villages, Disadvantages Regions and Transmigration as state on Ministry of Education and Culture Regulation of 13/2015 about the criteria of disadvantages region in order of special allowance allocation. The regulation mentioning the definition of disadvantages region as the remote or underdeveloped area, areas with remote indigenous peoples' conditions, borderland, social disaster area, or another area with emergency status.

Meanwhile, teachers who have assigned on TFT program are professional teachers who already have educator certificates as required by the law. The government says that they have been administratively qualified and have been given the personality strength and spirit of nationalism when doing their tasks. They also have been tested on social sensitivity issues, have high adaptability and high experience in serving as teachers in the special region.

The teachers are the best graduates of the Pre-service Teacher Professional Education Program which includes five groups, i.e.:

- Teacher Professional Education Program SM-3T, a pre-service program for teachers who already participate in a SM-3T, a government’s movement program to education bachelors who have to serve as teachers in disadvantages area for 2 years.
• Teacher Professional Education Program S1-boarding, a pre-service program for teachers from basic education bachelors of the disadvantages area’s high school alumni.

• Collaborative Vocational Teacher Professional Education Program, a pre-service program for productive vocational teachers. The input of this group are the engineering bachelors from non-state university which collaborate with the state university.

• Basic Science Teacher Professional Education Program, a pre-service program for professional science teachers from non-educator program who were given pedagogical strengthening in state university.

• Integrated Teacher Professional Education Program, an integrated pre-service program for teachers with bachelor degree from disadvantages area’s high school alumni.

The policy formulation of TFT program has been through the appropriate stages of policy-making that should be. According to Dunn (R. Nugroho, 2007), there are 5 stages in policy formulation, i.e.: 1). Agenda Setting; 2). Policy Formulation; 3). Policy Adoption; 4). Policy Implementation; and 5). Policy Assessment. In formulation stage, the Ministry of Education and Culture becomes a leader of the policy-making. The formulation involves various stakeholders of education and government side, i.e.: Ministry of Administrative and Bureaucracy Reform, State Employment Agency, National Selection Committee, and Local Government of Province or City/District level.

In case of formation arrangement of TFT program, the Ministry of Education and Culture have coordinating with Ministry of Administrative and Bureaucracy Reform to assess teacher needs through workload analysis regulation. This analysis was held to know the ideal number of civil servant teacher needs for every target area. The Ministry of Education and Culture also have to coordinate with National Employment Agency (NEA) and Local Employment Agency (LEA) in every province in order to propose the recruitment formation data into e-formation application of the Ministry of Administrative and Bureaucracy Reform. Then, after all the recruitment formation have proposed and accepted by the application, the committee will conduct a data verification and validation until all the names of candidates have established.

In the implementation phase of the policy, the TFT program has been implemented twice with the number of teachers sent to the regions significantly increasing from stage 1 of 789 teachers to more than 6,000 teachers at the second stage a year later. Based on the documentation of this program, the recruitment implementation is very open and accountable because it’s involving the National Selection Committee as the recruiter. The recruitment announcement is widely announced using national newspaper and other online media with expectation of getting the best qualified candidates.

D. Supporting Factors and Obstacle of Program Implementation

In the implementation of the (TFT) program, there are several aspects that can be called as supporting factors:

• Good communication and coordination between central government and local government; In this case the central government has several times has held coordination meetings with the targeted local government with the intention to make memorandum of understanding (MoU) so that the implementation of the program can run smoothly and minimize the different views between them.

• Availability of budget allocation to central and local government; in a policy implementation, one of the factors that can have an effect on the successful implementation of the program is the availability of budget or funds. To ensure the passage of this policy, the central government has prepared the budget with the approval of the House of Representatives through several hearings to set the preparation, recruitment, briefing and departure of the selected teachers to their place of service in selected 3T region. Then, in cooperation with the Ministry of Finance and Ministry of Administrative and Bureaucracy Reform, local governments are also preparing their own budgets to accommodate these teachers as local government assets and allocate regional salaries and allowances in accordance with their respective local regulations. The role of the Ministry of Finance and the Ministry of Administrative and Bureaucracy Reform is to ensure that the local government has a financial budget that has not exceeded the personnel expenditure limit of 50 per cent of the local budget and to ensure that the area provide the formation of the employees procurement in accordance with the required formation.

• The availability of human resources in the implementation of the policy; when looking at the availability of Human Resources, then the implementation of this policy shows two elements: the implementing elements and the participant’s elements. From the implementing elements of the policy can be seen from the number of employees who are quite numerous and have been in accordance with their respective fields, either from the central government elements (the relevant ministries), as well as from local government elements that becomes the spearhead of the program implementation. Then, the resource of the participants can be seen from the huge potential that is owned by a large number of professional and certified teachers and has been prepared to devote themselves to educate the nation's children in all disadvantages regions in Indonesia.

As for the obstacle factors of the implementation of TFT program are:

• Some resistance actions from local part time teachers in some province. The implementation of the program caused some problems and conflicts. Some of the social
problems that arose were the jealousy that occurs between the part time teachers who has served in the previous disadvantages region. It is occurs due to a significant difference in salary income between the TFT teachers and them who serve in the same area. Another issue is the availability of employment opportunity. In some areas some teacher student held demonstrations and protests against the implementation of the TFT program because they thought it would close their chances to be appointed as educators after graduating from university.

- The resistance from some local governments. Some regional Heads refused to participate in this program because they received pressure from some of their community to prioritize local resources to be appointed as TFT teachers.
- Slow bureaucratic process in some region. In the assessment process of civil servants, the Ministry of Administrative and Bureaucratic Reform ask for many requirements from the Local Employment Agency (LEA), such as needs analysis and formation mapping of employment that requires in considerable time. Unfortunately, some of LEA even take longer time due to unpreparedness of resources and field data. The slowness of the bureaucratic process is also caused by several local government officials who are in the law process due to corruption or bribery, but the status and authority has not been transferred to the replacement official.

V. Conclusion

Education has a very important role in the development of human resources quality in the social environment. Education is also one of the basic capital as well as the key to the success of development in a country. It also has a strategic role in preparing a quality generation for the future, so if the level of education has been in high condition, at least it is describe the mindset and civilization of people in that area.

The implementation of the TFT program is a strategic step towards achieving equitable quality of education, thereby strengthening the areas and villages especially those belonging to the special disadvantages area within the framework of the Republic of Indonesia. The successful implementation of this program will be the responsibility of all institution who involved in this policy implementation.

REFERENCES

[1] Kementerian Pendidikan dan Kebudayaan, Bahan Paparan Program Usulan dan Anggaran Guru dan Tenaga Kependidikan Direktorat Jenderal Guru dan Tenaga Kependidikan. Jakarta, 2015a.
[2] Kementerian Pendidikan dan Kebudayaan, Melalui Program TFT, Pemerintah Upayakan Pemerataan Pendidikan di Indonesia, 2015b.
[3] A. Ilfiyah, Kegagalan Pemerataan Guru; Evaluasi SKB 5 Menteri Tahun 2011 tentang Penataan dan Pemerataan Guru PNS di Indonesia. Jakarta: Indonesia Corruption Watch, 2015.
[4] USAID, Tata Kelola Distribusi Guru secara Proporsional (DGP). Jakarta: USAID & Kinerja, 2014.
[5] S.Z. Abidin, Kebijakan Publik (2nd ed.). Jakarta: Salemba Humanika, 2012.
[6] I. Abidin, Kebijakan Publik, Teori dan Praktek. Yogyakarta: Penerbit Andi, 2004.
[7] I.S. Rawita, Kebijakan Pendidikan: Teori, Implementasi, dan Monev. PT. Kurnia Alam Semesta, 2013.
[8] N. Fattah, Analisis Kebijakan Pendidikan. Bandung: PT. Remaja Rosda Karya, 2012.
[9] R. Nugroho, Analisis Kebijakan. Jakarta: PT. Elex Media Komputindo, 2007.
[10] A. Suryadi and H.A.R. Tilaar, Analisis kebijakan pendidikan: suatu pengantar. Remaja Rosdakarya, 1993.
[11] T.R. Dye, Understanding Public Policy, New Jersey : Prentice Hall, 1995.
[12] A. Santos, Analisis Kebijakan Publik: Suatu Pengantar. Jakarta: Gramedia, 1993.
[13] H.A.R. Tilaar and R.N. Dwijowijoto, Kebijakan pendidikan: Pengantar untuk memahami kebijakan pendidikan dan kebijakan pendidikan sebagai kebijakan publik. Pustaka Pelajar, 2008.