RESEARCH POLICY TOWARDS A WORLD CLASS UNIVERSITY

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Abstract
The research aims to analyze the policy toward World Class Research University. This research is using qualitative analysis of basic analysis with flow analysis, a flow which combines at all stages, start from collecting the data, categorizing, patterning the concept or theme and reconstructing the scope of analyzing activities. The flows of analysis are continuously occurring on each of stages in any research activities. In addition, it needs another analysis with deductive analysis when it is done with the rearrangement of crude data and tentative analysis to construct the synthesis more abstract. The results of the research are concluded that the policy towards World Class Research University College needs a strategy to create a Research Group (RG) based on expertise supports, guidelines and rewards to produce an innovative research works. This step becomes an innovation system of research policy to improve the quality of research by using appropriate guidelines and national indicators to higher education towards a World Class University.

Keywords: policy, research, world class university

1. Introduction
The College becomes a center of the development, the dissemination of science, technology and also to improve the people's welfare through research systemically. Research policy is being a hope for the academics and the researchers to improve the science and technology which is accompanied with publication results systemically, from national and international. The research obligation is a mandate of Act No. 20 year 2003 about the national education system article 20. There are also research obligations in act number 12 year 2012 of higher education Article 45 where the College's research is directed to develop science and technology, as well as improving the welfare of society and the competitiveness of Nations. It is the same with the regulation of the Minister of research, technology, and higher education (Permenristekdikti) of the Republic of Indonesia Number 44 years 2015 article 1 about national standards of higher education indicates that national standards of higher education is a standard unit which includes national standards of education, which is added with national research standard, and the research in community. National research standard is the minimum criteria of research system on the college that prevails in the whole government law territory of Indonesia. Management or good governance (good university governance) needs research development gradually. The research developments become the heart of the main concept of world class universities. Research becomes the main elements beside the other support powers to create a top-quality research. Fixing the research policy, it needs to be done in answering one of the arguments against the indicators of World Class University. Policy in etymology comes from Greece, Sanskrit and Latin. The root of word comes from Greece and Sanskrit language Polis (City-State) and Pur (City) which is entered into Latin became politea (State) and finally into Middle English policie that is acceptable with public issues control or Government Administration. (Dunn: 1995).

The existing of the policy process models have several differences but also have similarities which are called implementation. It means that scientists agree that implementation is a stage that has to exist in the public policy process.

1.1 Model Smith
Smith states that there are four primary variables that are involved in the implementation of public policy. Each of the variables is connected in reciprocal relation that caused tension that pushes the changes. The tension between the two variables will
affect the tension to another variable which is caused adjustments or changes to reduce the tension. Free variables inside are invisible.

Figure 1. Smith’s implementation process model

1.2 Meter and Horn Model

Unlike the Smith, from the Meter and Horn’s model, it can be noticed there are three dimensions which is called free variable of "resources", "Standards" and “policy’s objects”. There are two variables that influence directly to the policy performance which are called of "executor attitude", “social conditions, “economics” and “politics”. Whereas the “executor organization Characteristics” variables affect "policy performance” directly and indirectly through "executor attitude".

Figure 2. police implementation model from Meter and Horn
1.3 Grindle’s Model

Grindle stated that there are two variables that affect implementation activities, namely (a) the contents of the policy and (b) the context of the policy. From the content of policies there are variables namely (1) interests which are affected, (2) types of benefits, (3) the scope of vision changes, (4) location of making decisions, (5) the implementer of the programs, (6) resources which are used. In addition, the policy context variables contain the elements of (1) Power, interest and strategy of the actors who are involved, (2) institution and regime characteristics, and (3) compliance and responsiveness.

Model tersebut disajikan dalam gambar berikut.

![Policy Implementation Model from Grindle](image)


Figure 3. Policy Implementation Model from Grindle

1.4 Mazmanian and Sabatier Model

Mazmanian and Sabatier states that there are three main variables that influence to implementation. It describes as (a) the problem of tractability, (b) ability of the policy decision to structure implementation, (c) Nonstatutory variables affecting implementation.

![Policy Implementation Model from Mazmanian dan Sabatier](image)


Figure 4. Police Implementation Model from Mazmanian dan Sabatier

1) The problem tractability is related to (1) technical difficulties, (2) diversity of target group behavior, (3) comparison on each target groups, (4) extend of behavioral change which is required.
2) The rules power to arrange the implementation which is related to several things: (1) clear and consistent the objectives, (2) adequate to apply the theory of causality, (3) Allocation based of financial resources, (4) hierarchical Integration in institution implementers, (5) decision rules from implementation agents, (6) the implementation officials recruitment, and (7) the formal access to the outside parties.

3) Variables outside of the rules that affect implementation are things associated with: (1) Social, economical and technological condition, (2) public support, (3) Attitudes and resources of which belonged to the Groups of constituent, (4) support of holders of power, and (5) the commitment and leadership of implementation officials.

1.5 Edwards III Models

When referring to the definition of the Dye, then the public policy may take the form of oral or written order. Policy makers should communicate with policy implementer properly so that there are no errors or distortions in its implementation.

Figure 5. Police Implementation model from Edwards III

From the definitions above, it can be concluded that the policy is a parameter or a referral which is made systematically in order to be implemented periodically to achieve a particular purpose at a particular place too.

According to Dunn (1991) there are three types or models of policy analysis, i.e. prospective models, retrospective model and integrative model. The description of the three forms or policy analysis model, i.e. prospective models, retrospective model and integrative model as follows:

Figure 6. Policy Analysis Model

_Sumber: Willian N Dunn (dalam Suharto: 2012)_
a. The prospective Model is a form of policy analysis which is directing the study on the consequences of the policy "before" a policy applied. This model can be known as predictive models because it often involves techniques of forecasting to predict the likelihood that will arise from a policy that will be proposed.

b. Model of Retrospective Analysis is performed against the policy consequences "after" a policy is implemented. This model is commonly known as evaluative model, because it involves a lot of evaluation approaches of the impact of policy that have existed or have been applied.

c. Integrative Model is a model blending from both of the models above. This model is often called a model of comprehensive or holistic model, because the analysis is performed against the consequences of policy which might arise, either "before" or "after" a policy operated. This model analysis usually involves forecasting technique and integrative evaluation.

College research policies towards world class (World Class University) are the major factor. It needs analysis of potential as a substance in detecting the model policy development of research in improving international institutions assessment indicators when the rank of World Class University has been given. An appropriate research policy will produce measurable schemes and systemic research.

There are four key pillars of World Class University approaches, namely the research quality, teaching quality, graduate employability, and international outlook. Where Research Quality is an indicator that shows how well the University research publication results. A University is a center of excellence of multi discipline study, so then, the University will be known at all over the world, because it has contributed to the science development. This indicator can also be seen from the quality of research, productivity (how many papers that have been published), Awards which is earned, even the awards such as Nobel Laureate or field medals.

Methods
This research uses qualitative research methods by doing observation at the Sebelas Maret University of Surakarta. Qualitative analysis model of this research is a model of the research from Mc Millan by following the model of the basic analysis of qualitative research i.e. inductive analysis. Qualitative analysis using flow analysis of flow (flow analysis) which combines all stages start form collecting the data, categorizing, patterning the concept or theme and structuring the scope of analysis activities. So that, the analysis is continuously occurring on each of stages in qualitative research activities and it needs to create in order to make an understanding of the data before the whole analysis has been done. (Mac Millan, H. James. 2001: 462).

The researcher uses interview techniques and searches for data documentation. The collecting data technique is collaborated to obtain the most accrete data. The strategies in investigate the information in this research, The researcher takes a constant comparative way, i.e. strategies for collecting data which contains historical information from time to time, sustainability and it is expanded until it can be produced a meaningful conclusion. After the data is collected and unification process is done, then it is sorted by combining synthesis from the data which is used as the target research.

Results
Based on the Rencana Induk Penelitian (RIP) or master plan of study from the Sebelas Maret University (UNS) of Surakarta in 2016 can be noticed that on the last four (4) years, the research which is based on national strategic research themes of Kemenristekdikti has been significantly increased, where the output of the research distribution at last four (4) year as distribution researches UNS during the last 4 years. Product of the research results and outputs of UNS
Surakarta which exists at the last four (4) years significantly increases from 2013-2015, as the following table:

Figure 8. Total of research proposer graphic and P2M PNBP year 2014 based on the faculty

Figure 9. Total of research proposer graphic and P2M PNBP year 2015 based on the faculty

Figure 9. Total of research proposer graphic and P2M PNBP year 2016 based on the faculty

In order to account for the research funds, researchers at the UNS Surakarta who has produced various types of output, called the publication results at the national journal which is accredited on national journal with ISSN or international journal which is indexed by SCOPUS. Moreover there is another output such as HKI, papers or proceedings, appropriate technology, Prototypes or models.
Discussion
The application of research policy starts with the strategy Research Group (RG) in college research policies towards World Class University are acceptable in the culture of the institution, because based on the application of Permenristekdikti Number 44 Years 2015 about national standards of higher education specifically about College Research Standards in detail and systematic. Permenristekdikti policy Number 44 Year 2015 makes the Sebelas Maret University of Surakarta in college research policies towards a World Class University in starts from several aspects, as follow: research result standards, research content standards, research process standards, Research Assessment Standards, researcher standards, research infrastructure standards, Research Management Standards and also funding and financing research standards.
**Figure 10.** Policy for research model towards a World Class University in UNS Surakarta
Conclusions
Policy for research model towards a World Class University in UNS Surakarta through research Group (RG) needs the supports from expertise, guidelines and awards system to produce innovation system in the research quality improvement that based on the national guidelines and indicators Higher education to meet the validity of institutions.

References

Peraturan :
Permenristekdikti Nomor 44 Tahun 2015 tentang Standar Nasional Pendidikan Tinggi.
Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional
Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi