

The School Principals' Role in Education Management at the Regional Level: An Analysis of Educational Policy in the Industrial Revolution 4.0

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ABSTRACT

The present study aimed to analyze the education policies in the era of educational reform. This policy is very monumental in the history of education in Indonesia, where enormous authority is given directly to schools. The schools can develop their respective innovations in developing a treatment for students in learning, the authority to determine the learning time, and the autonomy to compile their own learning textbooks according to the agreed curriculum. But the most important thing is to be able to produce outstanding students. Therefore, if student achievement decreases, society cannot blame the agreed policy. Furthermore, the local education offices have an important role in providing solutions to the educational problem in that area. Moreover, the principal has a significant role in education management at the region level, especially in the era of the Fourth Industrial Revolution, which demands all education actors have maximum competence and also compete with the global business and industrial world.

Keywords: Education management, Principal, Fourth industrial revolution.

1. INTRODUCTION

The Government Regulation, Number 19 of 2005 concerning National Education Standards mandates that each unit of education at the primary and secondary education levels must compile a curriculum regarding Content Standards, Graduate Competency Standards, Education Management Standards, Process Standards, and Assessment Standards as well as guided by the guidelines prepared by the National Education Standards Agency. Fulfilling this mandate, generally, Senior High Schools have compiled the Education Unit Level Curriculum, which is an operational curriculum and implemented in each educational unit. Besides, it functions as a guideline for implementing learning activities to accomplish particular goals of education [1].

Tilaar argues that the implementation of the KTSP cannot be denied from efforts to achieve the National Education Standards (SNP), adjustments to the conditions of the education unit, society, and the environment. In this regard, the preparation of the KTSP should begin with a context analysis that includes SNP

analysis, analysis of educational unit conditions, and analysis of the community and the environment around the school conditions [2]. So, the KTSP must be prepared according to the needs, characteristics, and potential of the educational unit and be guided by national education standards. In this case, before compiling the KTSP, each school must analyze each national education standard first.

Furthermore, one of the SNP analyzes that must be carried out is an analysis of education management following the Regulation of the Minister of National Education Number 19 of 2007 concerning Education Management Standards including program planning analysis, work plan planning analysis, overseeing and assessment analysis, school authority analysis, system analysis, and information of management system. Also, this Management Standard includes planning, implementing, and supervising educational activities at the unit level, including in the regional, provincial, or national levels [3]. These standards made is to increase the efficiency and effectiveness of education delivery [4].

In the concept of education decentralization, Nichols, et.al [5] explained that decentralization of education is implemented in the concept of education management at the district level. Based on various studies, in developing countries showed that the decentralization of education is a success in North America . Even though, in other countries reported is a failure. So the decentralization must be adopted in Indonesia. Moreover, the process of decentralizing education includes two main concepts. The first is a transfer of education policy authority from the central government to local governments. The second is the transfer of decisions regarding the education sector from the government to the community. The basic idea in those concepts is that the community as the customers should have the ability to decide what kind of education they want.

Besides, decentralization of education management is the delegation of authority from the government to the regions to make management decisions and formulate their own plans in dealing with education problems concerning the national education system [6] and [7]. In its concept, decentralization of education management is an effort to delegate part or all of the authority, which should be carried out by the government to the community. One manifestation of this decentralization is the implementation of a process of flexibility in the management of education delivery [8].

Moreover, for a positive impact to be realized, good educational planning skills in the regions are needed. With good educational planning skills, it is hoped that it can reduce the possibility of serious problems arising. Fiske (1996) stated that, based on the experiences of various developing countries that implement autonomy in the field of education, autonomy has the potential to cause problems: conflict of interests between the Central and Regional Governments, decreased quality of education, inefficiencies in education management, and inequality in educational equality, limited movement and space. Community participation in education aims to reduce demands for educational accountability by the government and increased accountability [9].

The importance of the planning process in Education Management at the district level as described by Wirt (2015), there are three definitions of policy; (1) as a written statement by the leader of the organization, (2) as the provisions which must be used as a guideline for each activity, to achieve organizational goals, and (3) as a road map in achieving organizational goals [10]. According to him, a good policy must meet the following requirements. The function of the principal as an educator is to create a positive school climate, provide advice to school members, provide encouragement to all education personnel, and implement attractive learning models for the teacher [11].

2. METHOD

This research was conducted based on the literature review from various relevant sources, described by Fathurrochman (2018) the study replicated the literature review [12]. Furthermore, this paper presents an in-depth study of the Role of School Principals in Education Management at District-Level (Educational Policy Analysis in the Fourth Industrial Revolution era) currently occurring in Indonesia [13]. The study focuses covers all policies taken by the government relating to the education policy in the Era of Industrial Revolution 4.0.

3. RESULT AND DISCUSSIONS

3.1. National Education Popularization Indicators

Referring to the indicators of the national education system, popularization, systematization, profiling, and politicization of national education, the proposed education development programs, as stated in Tilaar (2000) are as follows:

- a) Developing and realizing the quality of education;
- b) Carrying out the quality of teacher education and education personnel;
- c) Creating professional educational human resources with reasonable rewards;
- d) To gradually decentralize the implementation of national education, starting at the provincial level while simultaneously preparing adequate facilities, human resources, and funds at the district level;
- e) Streamlining the education bureaucracy by restructuring the central department to make it more efficient;
- f) Removing various laws and regulations that hinder innovation and experimentation by implementing autonomy for educational institutions;
- g) Revise or replace the Law no. 2 of 1989 concerning the system of national education by laws and regulations and their implementation
- h) Fostering community participation, especially in the regions in their awareness of the importance of education and training to build a new Indonesian society. A community forum is needed to accommodate this community involvement.
- i) Maintain close cooperation between training institutions and the business world
- j) Depoliticize national education by creating a political commitment from the community and government to free education as an instrument of authority;
- k) Increasing the dignity of the educational profession by improving the quality of education, requirements, and utilization of professional personnel, accompanied by gradually increasing the remuneration of the educational profession.

Based on the principle of autonomy, the education policy in the regions can be put into the Education Development Strategic Plan. However, it seems that the regions are continuing to improve in terms of political policies and staffing, which have also undergone drastic changes.

School leadership has been recognized in a few international papers [14] and research [15] and [16] the main function is to ensure the education quality. Referring to the literature on effectiveness and development of a school, the principal is very important in administering advancement processes [17] developing effective schools [15] and promoting equity in education [18].

The following is the total ratio of the use of education funds in the 15 districts and 8 cities that are sampled in Indonesia.

| No. | Districts | Provinces | Education Spending | Regional Budget and Expenditure Income Ratio (%) (APBD) |
|--------------------------|-----------------|---------------------|--------------------|---|
| 1 | Bintan | Kepulauan Riau | 234.528,064,000 | 1,117,058,295,309 21.00 |
| 2 | Cirebon | Jawa Barat | 1,283,995,086,953 | 2,830,893,761,058 45.36 |
| 3 | Garut | Jawa Barat | 1,525,055,329,974 | 3,015,617,524,519 50.57 |
| 4 | Karanganyar | Jawa Tengah | 924,588,204,950 | 1,691,634,199,000 54.66 |
| 5 | Kuningan | Jawa Barat | 1,070,201,112,217 | 2,120,109,715,351 50.48 |
| 6 | Kupang | Nusa Tenggara Timur | 342,195,905,990 | 1,013,038,477,665 33.78 |
| 7 | Lampung Selatan | Lampung | 623,399,829,950 | 1,661,326,799,700 37.52 |
| 8 | Lombok Utara | Nusa Tenggara Barat | 196,686,751,148 | 1,200,863,836,345 16.38 |
| 9 | Malang | Jawa Timur | 1,270,757,572,274 | 3,302,969,222,643 38.47 |
| 10 | Mamuju | Sulawesi Barat | 226,225,945,026 | 1,540,283,054,100 14.69 |
| 11 | Mojokerto | Jawa Timur | 754,676,980,392 | 2,225,693,946,326 33.91 |
| 12 | Ogan Ilir | Sumatera Selatan | 457,208,449,588 | 1,230,778,391,339 37.15 |
| 13 | Pangandaran | Jawa Barat | 416,060,221,082 | 1,145,479,268,622 36.32 |
| 14 | Pangkep | Sulawesi Selatan | 492,905,760,741 | 1,127,757,157,017 43.71 |
| 15 | Serdang Bedagai | Sumatera Utara | 536,334,386,634 | 1,166,459,388,168 45.98 |
| 16 | Banda Aceh | Aceh | 439,275,204,972 | 1,168,955,301,261 37.58 |
| 17 | Cirebon | Jawa Barat | 425,813,994,650 | 1,253,260,157,000 33.98 |
| 18 | Magelang | Jawa Barat | 940,091,781,433 | 1,991,093,895,045 47.21 |
| 19 | Mojokerto | Jawa Timur | 213,500,846,701 | 815,212,120,650 26.19 |
| 20 | Paha | Sulawesi Tengah | 334,353,735,525 | 1,206,306,923,617 27.72 |
| 21 | Sabang | Aceh | 155,869,707,780 | 648,293,107,987 24.04 |
| 22 | Samarinda | Kalimantan Timur | 634,715,595,538 | 3,429,624,652,991 18.51 |
| 23 | Serang | Banten | 479,554,324,932 | 1,057,915,011,530 45.33 |
| Amount of Districts (15) | | | 10,354,819,600,919 | 26,389,963,037,162 39.24 |
| Amount of Cities (8) | | | 3,623,175,191,530 | 11,570,661,170,081 31.31 |
| Total Amounts (23) | | | 13,977,994,792,449 | 37,960,624,207,243 36.82 |

Source: Ministry of Education and Culture, Republic of Indonesia Data's

Based on the data in the education spending table above, it can be concluded that spending on Regional Budget and Expenditure Income should be 20%, but in reality, it still varies between districts or cities in Indonesia [19].

With these managed funds, education policy in Indonesia should be able to increase the capacity and capability of school principals in every region in Indonesia in facing the Fourth Industrial Revolution era which demands multi competency of school principals in managing schools with various futuristic management approaches.

3.2. Policy Contents, Analysis of Positive and Negative Aspects

Some of the things that are the contents of the policy and the positive and negative influences in the

management of education at the district and city levels are:

a) Improving the Quality of Education

Local governments must continue to encourage and develop schools to administer the idea of "School-Based Quality Improvement Management", an efforts in enhancing the education quality by mobilizing all existing resources in schools and their environment, both teachers, parents of students, local government and the private sector to coordinate and planned to support the improvement of the quality of education in schools [20].

b) Expansion of Learning Opportunities

To accelerate the completion of the 9-year compulsory basic education program and provide the widest possible opportunity for the community to get an education, new efforts can be taken as follows: construction of new school units, construction of new classrooms, open junior high school managed by society, Basic Education Compulsory Education campaign or counseling, providing scholarships and operational assistance funds, education for elementary, and secondary school, providing educational operational funds for elementary schools, providing learning equipment assistance for elementary students from underprivileged families, fostering and encouraging the implementation of out-of-school education by the community in the form of Learning Activity Centers [21].

c) Efficiency and Effectiveness

To realize an efficient and effective education, formal education providers need to be equipped with knowledge of management and administration of school administration, management, and administration of office administration, managerial abilities, ability of project managers, management and education planning, monitoring and evaluation capabilities [22].

d) Formulating Regional Education Regulations

The Regional Regulation on education in the District or City is a legal basis that can be used by all the people of the Regency or City as a continuation of the National Education System Law Number 20/2003. Starting from this rule, several macro and micro policies can be made in the context of carrying out the mandate of the Preamble of the Basic Law 1945.

3.3. Best Implementation Solution Formulation

The author provides the best implementation solution in region education management with the formulation of the Planning Model, along with an overview of the stages of region education planning. In brief, the explanation is as follows:

- a) Performing the strategic environmental analysis. The strategic environment is the external environment that affects region education planning, for example, Regional building program, Region Strategic Planning, laws, and regulations, poverty levels, employment opportunities, community expectations of education, experience good practice, demands for autonomy, demands for globalization, and the development of science and technology. Strategic environmental change must be internalized into regional education planning so that it is truly integrated with the changing strategic environment [23].
- b) Conduct a situation analysis to determine the status of the current education situation which includes the education profile (equity, quality, efficiency, and relevance), school/teacher/student mapping, management capacity, and resources at the district level, cities and other schools, and current educational best practices [24].
- c) To formulate education that is expected in the future which is outlined in the form of a vision, mission, and educational goals, which includes at least equal opportunity, quality, efficiency, relevance, and capacity building for region education.
- d) Look for gaps between the second and third points as input for the preparation of the overall future education plan (5 years) and short-term plans (1 year). These gaps or challenges include equality of opportunity, quality, efficiency, relevance, and capacity building for education management at the district and school levels.
- e) Based on the results of the fourth point, an annual activity plan for 5 years (strategic plan) and a detailed annual operational plan are prepared.
- f) Implementing the regional education development plans through concrete efforts that can increase equal opportunity, quality, efficiency, relevance, and education management capacity at the region and school levels.

Monitoring the implementation of plans and evaluating the results of educational plans [25]. The results of the evaluation will tell whether the educational results are as planned. So that in essence a plan is made to change the “current educational situation” towards an “expected educational situation” in the future. For this reason, three keywords must be understood, namely policy, planning, and educational programs [17].

Based on the research results, the authors recommend the Industry 4.0 Component Model because based on scientific studies and the results of recent research, this model is claimed to be more comprehensive because it includes more tangible

elements for school principals in developing a futuristic education management model [26].

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Based on the results of the study the authors recommend the Industry 4.0 Component Model, because based on scientific studies and the results of recent research, this model is claimed to be more comprehensive because it includes more tangible elements for school principals in developing a futuristic education management model [26][27].

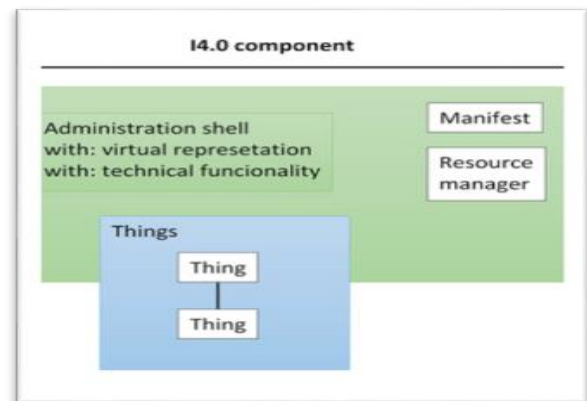


Figure 1 The component model of industry 4.0. Source: (VDI/VDE Gesellschaft Mess-und Automatisierungstechnik, 2015).

4. CONCLUSIONS

From the results and discussion above, it can be concluded that educational management in the Fourth Industrial Revolution era, both at the level of the central government, provincial government, and at the regional level is a planned effort in managing all educational resources by several people in one education system to achieve educational goals either macro or micro. Educational management is important in the management of educational institutions. In general, there are four main issues in education management in Indonesia, namely the quality of education, expansion, and distribution of quality education services, relevance, effectiveness, and efficiency. According to Regulation of the Minister of National Education No.19 of 2007 on Education Management Standards by Primary and Secondary Education Units, there are six things that must be treated and considered in the education management which implemented in primary and

secondary education systems. Those things are Planning the Program, Implementing the Program, Monitoring and Evaluating the Program, School Leadership, Management Information Systems, and Special Assessments. *Badan Standar Nasional Pendidikan* (BSNP) is the agency that has the right to assess and monitor the management standards.

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