

Strengthening Education Management to Improve Education Quality in the Era of Regional Autonomy: A Case Study of the Provinces of Riau Islands, Bangka Belitung Islands, Bali, Gorontalo, and Special Region of Yogyakarta, Indonesia

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Abstract. This research examines education management to improve the quality of national education in the Era of Regional Autonomy. This is qualitative research with a case studies approach in the provinces of Riau Islands, Bangka Belitung Islands, Bali, Gorontalo, and Special Region of Yogyakarta. By using Terry & Rue's model, this research finds that increasing access to education has not been followed by an increase in the quality of learning outcomes. Meanwhile, each management element (planning, organizing, actuating, and controlling) revealed certain obstacles in supporting education programs in regions, which impedes enhancing the quality of Indonesian education in the era of regional autonomy. One of them is the budget planning. This research recommends improvements to each management element, such as establishing a reward and punishment system to fulfill minimum service standards (SPM) in the education sector through a mechanism for the General Allocation Fund (DAU) budget allocation.

Keywords: Division of Authority; Education Management; Education Quality; Quality Of Learning; Regional Autonomy.

1 Introduction

In economic growth theory, both neoclassical and New Endogenous Growth Theory, quality education is an important factor in the economic development of a nation. Aside from these theoretical reviews, empirical evidence shows that developed countries have higher educational quality/competitiveness than developing countries. Of course, there is no doubt that the ability of developed countries to manage the cooperative efforts of all stakeholders in a planned and systematic manner held in specific environments, particularly formal educational institutions, is at the root of their success in achieving quality education and its benefits in development. All of these planned and systematic activities are at the core of educational management to achieve educational goals [1].

Education management is very important in the national context. In Indonesia this context becomes more essential, especially when it comes to *Implementasi Kurikulum Merdeka* (IKM; Implementing the Independent Curriculum) because IKM has several components and aspects, ranging from planning, organizing, implementing, and evaluating [2]. In their book *Principles of Management*, Terry and Rue divide four basic management functions. To improve the quality of Indonesian education, these four management functions must be well implemented in the implementation of education. The four basic functions of management are: planning, organizing, acting, and controlling (POAC) [2].

The government's efforts to strengthen education management to improve the quality of education in Indonesia have been ongoing for a long time. Especially since the era of regional autonomy began in 1999, the government has continued to strive to strengthen education management. The final regulation governing education management is Law Number 23 of 2014 concerning Regional Government. This law regulates the division of authority in the field of education between the central government, provincial regional governments, and district/city regional governments. However, even after 24 years of this regulation, efforts to improve the quality of education in Indonesia continue to face challenges.

In reference to The Program for International Student Assessment (PISA) 2018 was conducted by the Organization for Economic Co-operation and Development (OECD) and education access data 2022 shows that increasing access to education has not increased the quality of education, particularly the quality of education outcomes in the national context [3]. Figure 1 depicts the National Gross Participation Rate (GPR/Angka Partisipasi Kasar; APK) trend from 2005 to 2022, which shows that the participation of school-age children in education is increasing. In 2022, the Gross Enrollment Rate for elementary school, middle school, and high school has reached more than 80%. However, related to PISA 2018, Indonesia ranks 74th (ranked 6th from the bottom) among countries worldwide. According to the results of the 2018 PISA evaluation, there is still a high proportion of students whose reading, mathematics, and science abilities are below the minimum competency, namely 70%, 71%, and 60%, respectively [3]. This means that, despite access to education has increased, the quality of education in Indonesia remains not optimal.

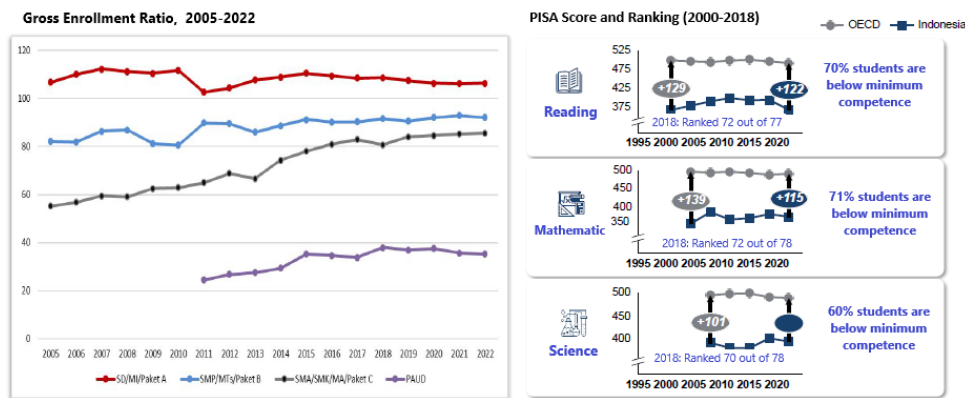


Fig 1 . Indonesian Gross Participation Rate and PISA Scores

Source: Presentation by the Head of the Center for Educational Standards and Policy,
The Indonesian Ministry of Education, Culture, Research, and Technology,
15 February 2023

Furthermore, the ability of Indonesian students in each field of assessment (reading, and mathematics) faces several obstacles. Nationally, in 2022, the percentage of students who scored above the minimum competency in literacy was 59.49%. Meanwhile, only 45.24% of students have scores above the minimum competency in numeracy [4]. This means that the proportion of students who scored above the minimum limit in the minimum competency assessment in numeracy remains low when compared to literacy. This demonstrates that there is still a gap in Indonesian students' abilities in both fields.

The condition of education in Indonesia shows that even though there are some regulations governing education management in the era of regional autonomy there are still several problems with the quality of education in Indonesia. As a result, it is necessary to examine the obstacles to education management in Indonesia, particularly in this era of regional autonomy. It is hoped that by improving education management, the quality of education in Indonesia will improve.

2 Research Methods

This research was conducted using a qualitative approach. The qualitative research method is a process of inquiry (questioning/investigation) regarding the understanding of something to obtain data, information, and texts of respondents' views using various methodologies in a problem or social or humanitarian phenomenon [5]. The data produced using this qualitative approach is descriptive in the form of written and spoken words from people and observed behavior [6]. A qualitative approach in this study was used to obtain data and information related to education management in the region starting from planning, organizing, and implementation to evaluation. Apart from that, data and information were also collected regarding the synergy between the central and regional governments in improving the quality of education.

This research took case studies in five locations, namely Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, Bali Province, and the Special Region of Yogyakarta. The Special Region of Yogyakarta was taken as a comparison area because it had a high PISA score in 2018 and high numeracy competency as released in the Education Report Card (*Rapor Pendidikan*) 2023. The other four locations were selected by looking at the School Participation Rate (*Angka Partisipasi Sekolah*; APS) aged 16-18 years in these areas. The consideration is that the level of access to education is the main component in the Minimum Service Standards (*Standar Pelayanan Minimum*; SPM), based on Government Regulation (PP) Number 2 of 2018 concerning Minimum Service Standards.

Regarding data from the National Socio-Economic Survey of the Indonesian Central Bureau of Statistics (*Survei Sosial Ekonomi Nasional*; Susenas) for 2020-2022, it is known that there is a disparity in the School Participation Rate aged 16-18 years at the Senior High School level. This level of access certainly influences efforts to improve the quality of education. The School Participation Rate at the Senior High School level category was chosen because it shows more striking disparities compared to the School Participation Rate at Junior High School and Elementary School. Moreover, high school students are prepared to become prospective

students who will pursue higher education, to produce quality and competitive higher education human resources.

Furthermore, National Socioeconomic Survey for 2020-2022 stated that the School Participation Rate figure aged 16-18 in 2022 in the Bangka Belitung Islands Province was 68.42%. Meanwhile, in the Riau Islands Province, which is both an archipelagic province and in western Indonesia, the School Participation Rate was 84.54% [7]. With almost the same regional characteristics, the Riau Islands Province and Bangka Belitung Islands Province have quite large differences in School Participation Rates. Furthermore, Gorontalo Province which is in the middle part of Indonesia, has a School Participation Rate of 71.68%. Meanwhile, Bali Province, which is also in Central Indonesia, has a higher School Participation Rate, namely 83.84% [7]

This article uses Terry & Rue's model of management. According to Sukarna (2011), the management elements referred to by Terry and Rue consist of planning, organizing, actuating, and controlling, which are also referred to as POAC. POAC can be a reference for management actors in carrying out their roles, including in education management. POAC can be described as follows:

1. **Planning.** Planning is the process of selecting facts and connecting existing facts, as well as creating and estimating for the future, to describe and formulate the activities needed to achieve the expected goals;
2. **Organizing.** Organizing is the process of determining, grouping, and arranging the activities needed to achieve the expected goals, placing the necessary people, providing the physical factors needed for work purposes, and determining the relationship of authority delegated to each person, in carrying out an activity;
3. **Actuating.** Implementation is the process of arousing and encouraging all group members to work to achieve the expected goals, by predetermined planning and organization;
4. **Controlling.** Supervision is the process of determining what must be achieved, and what is being done, assessing implementation, and making improvements, so that the implementation of activities is by the plans and expected goals [8].

Based on the problems as explained above, this research aims: to examine Indonesian education management and then provide input for strengthening it to improve the quality of national education. This research will examine education management in the provinces of Riau Islands, Bangka Belitung Islands, Bali, and Gorontalo, and compare them with Yogyakarta Special Province that have high PISA scores. This paper uses the POAC model from Terry & Rue. This POAC model is used to find out how the education management process in Indonesia takes place, starting from the planning, organizing, actuating, and controlling stages. By using the POAC model, this article will find out the weaknesses of educational management currently implemented in Indonesia, and how to improve it.

3 Result and Discussion

3.1 Education Report Map: Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, Bali Province, and Yogyakarta Special Province

From the 2023 *Rapor Pendidikan* data (2022 national assessment results), the proportion of students who have grades above the minimum limit in assessment competence minimum field literacy The five study loci are quite diverse. In general, the achievements of elementary school, middle school, and high schools in the Riau Islands Province, Bali Province, and Yogyakarta Special Province are in a good category, except for vocational schools which are still in the medium category. For Gorontalo Province, the attainment of elementary school, middle school, and high school is in the medium category, except for vocational schools which are still in the low category. For Bangka Belitung Islands Province, elementary school and middle school achievement is in a good category, except for high school and vocational school which are still in the medium category

Concerning data from the *Rapor Pendidikan 2023* (Education Report Card) which is the result of the 2022 national assessment for literacy, numeracy, and character index competencies, shows that the proportion of students who have grades above the minimum limit in literacy competence assessment at the five study loci are quite diverse. In general, the achievements of elementary school, middle school, and high schools in the Riau Islands Province, Bali Province, and Yogyakarta Special Province are in a good category, except for vocational schools which are still in the medium category. For Gorontalo Province, the attainment of elementary school, middle school, and high school is in the medium category, except for vocational schools which are still in the low category. For Bangka Belitung Islands Province, elementary school and middle school achievement is in a good category, except for high school and vocational school which are still in the medium category [9].

As for numeracy competence assessment results at the five research locations is are also quite diverse. In general, the achievement of elementary school, middle school, high school, and vocational school in the Riau Islands Province is in the medium category. For Gorontalo Province, elementary school, middle school, high school, and vocational school achievements are all still in the poor category. For Bangka Belitung Islands Province and Bali Province, the attainment of all levels of education (elementary, middle, high, and vocational school) is still in the medium category. Compared to the Special Region of Yogyakarta Province, the attainment of elementary school, middle school, and vocational school levels of education is still in the medium category, but for high school the category is good. From these five research locations, in general, we can see that the proportion of students who have scores above the minimum competency in numeracy is still low compared to literacy [9].

The Character Index at the five research locations is also still quite diverse. The character index achievements of the Riau Islands Province at the elementary school, middle school, high school, and vocational school levels are in a good category. Likewise, for Bangka Belitung Islands Province, Bali Province, and Yogyakarta Special Region Province, all levels of education are categorized as good. Meanwhile for Gorontalo Province, middle school, high school, and vocational school are good, but for elementary school, it is still in the medium category. Only the Province of the Special Region of Yogyakarta has its minimum competency achievements in the field of numeracy in the good category [9].

The 2023 Indonesian Education Report Graphics for general education levels in the six provinces above can be seen in Fig 2.

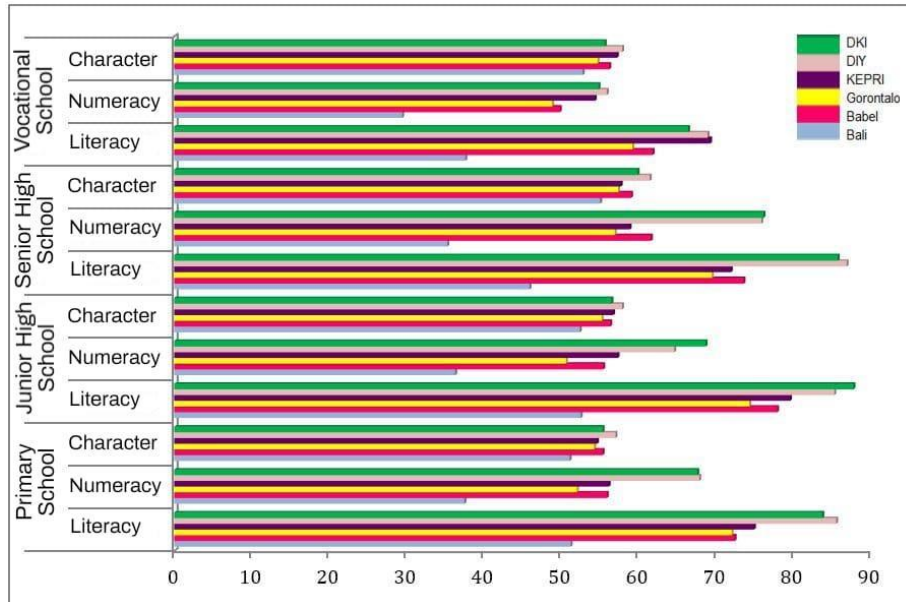


Fig 2 *Rapor Pendidikan* for the Bangka Belitung Islands, Riau Islands, Gorontalo, Bali, and Yogyakarta Special Province

Source: Ministry of Education, Culture, Research, and Technology, 2023.

3.2 POAC Analysis in Regional Education Management

3.2.1. Analysis of Planning

In the planning element, several aspects are analyzed, namely related to plans for the development and distribution of human resources, the availability of accurate and integrated educational data for educational planning, as well as obstacles in human resource development for improving and equalizing the quality of education.

Based on the findings obtained both at the regional education office and the *Unit Pelaksana Teknis* (UPT; Technical Implementation Unit) of the *Balai Besar Penjaminan Mutu Pendidikan* (BPMP; Education Quality Assurance Center) and the *Balai Guru Penggerak* (BGP; Teacher Activator Center) in five research locations, in general planning in the implementation of education in the regions has referred to Strategic Plan of the Ministry of Education, Culture, Research, and Technology [10]. This strategic plan is used as a guide for regional governments in preparing regional program plans in the fields of education and culture. This means that there is quite a good alignment between the national education vision and existing education programs in the regions.

Likewise, regarding data-based planning, both regional governments and education units have used *Regional Rapor Pendidikan* and *Rapor Satuan Pendidikan* (Education Unit Report Cards) in establishing *Perencanaan Berbasis Data* (PBD; Data Based Planning).

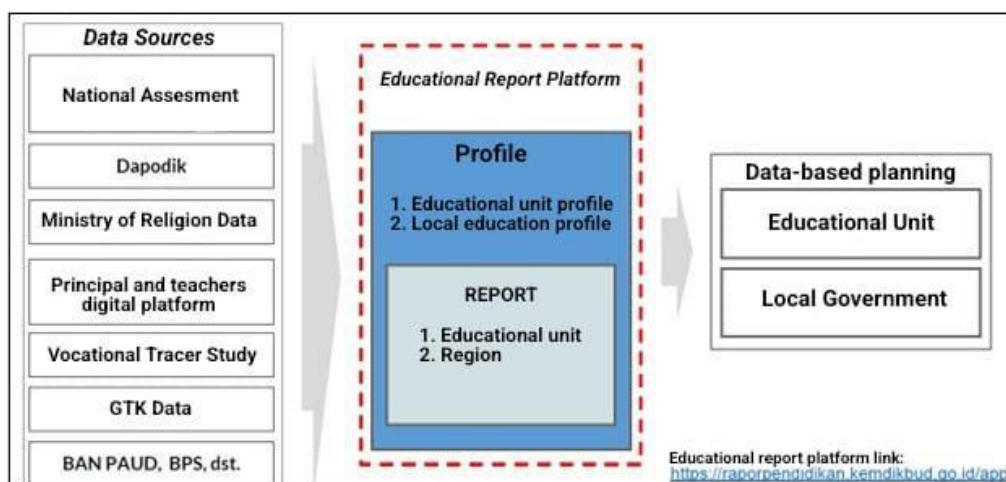


Figure 3. PBD at the Education Unit and Regional Government Level

Source: Presentation by BPMP Riau Islands Province, March 8, 2023

Human resource development in the education sector is also the focus of the regional government in the study research locations. For this reason, the regional government through the education department together with the *Badan Kepegawaian dan Pengembangan Sumber Daya Manusia* (BKPSDM; Regional Personnel and Human Resources Development Agency) make a mapping of the number of teachers needed in educational units in the region, starting from preschool, elementary school, middle school, and high school levels. This is expected to overcome the problem of teacher shortages in the regions [11].

However, based on findings in Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, and Bali Province, several challenges or obstacles were found in the *Pengembangan Tenaga Kependidikan* (PTK; Development of Educational Personnel) in the area, namely:

First, the determination of *Guru dan Tenaga Kependidikan* (GTK; Teacher and Educational Personnel) formation, especially *Aparatur Sipil Negara* (ASN; state civil service teachers and *Pegawai Pemerintah dengan Perjanjian Kerja* (PPPK; Government Employees with Work Agreements), is entirely the authority of the central government which refers to *data pokok pendidikan* (Dapodik; basic education data) two years before receiving the formation. In fact, in the year of acceptance, the needs of regional GTK, especially ASN and PPPK teachers, have changed. Meanwhile, regional governments, which better understand regional needs, do not have the authority to place PPPK personnel.

Second, from the four research locations, it was found that regional governments have limited budgets for providing education, especially for financing the management of teaching staff for educational units in the region. The regional education budget percentage of 20 percent of the total *Anggaran Pendapatan dan Belanja Daerah* (APBD; Regional Revenue and Expenditure Budget) is not only for developing and improving the quality of human resources such as teacher training and education personnel but also includes salaries and other routine costs.

Third, the moratorium policy on terminating the appointment of PPPK from the central government, especially the Ministry of Administrative and Bureaucratic Reform, has also caused a reduction in the ratio of teachers to students in the regions. The moratorium is stated in Circular Letter (SE) Number B/185/M.SM.02.03/2022 of the Ministry of State Apparatus Empowerment and Bureaucratic Reform. This is one of the main problems faced by local governments in providing quality education.

In summary, in the planning aspect, the determination of education programs from the Central Government is not in line with programs in the regions. Regional planning is decided before the program is determined by the Central Government which causes a lack of budget support.

3.2.2. Analysis of Organizing

For the organizing element, the information extracted is related to the pattern and frequency of communication between the central and regional governments, increasing the effectiveness of frequency in communication between the central and regional governments, efforts to literacy education policies between the central and regional governments, and educational governance mechanisms.

Based on the findings in the Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, and Bali Province, in general, communication patterns between the central and the regional are carried out using various approaches.

First, approach through the Project Management Office (PMO) mechanism. The existence of the PMO also becomes a medium for multi-level policy literacy efforts between the central and regional governments and between regional governments and education units [11].

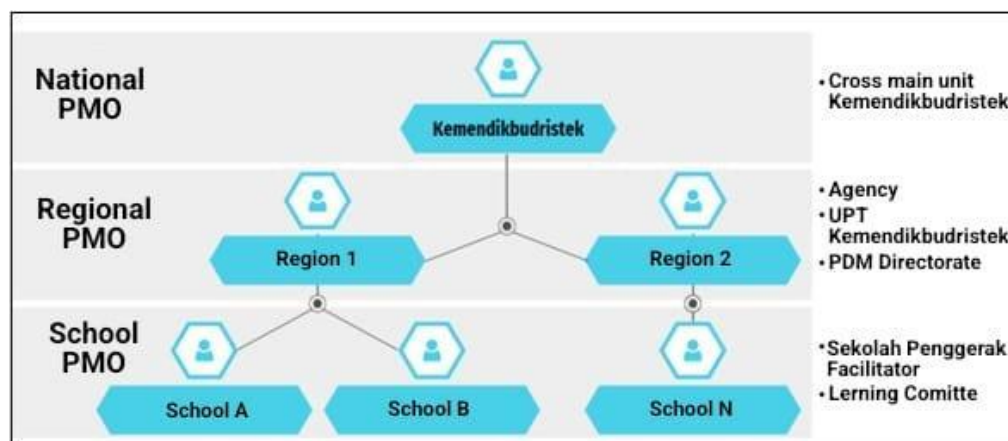


Fig 4. Tiered Communication Model through PMO

Source: Presentation by BPMP Riau Islands Province, March 8, 2023

Apart from being a medium for policy literacy, PMO also acts as a forum for problem-solving for problems encountered, both in local governments and educational units. When there is a problem at the educational unit level PMO, the problem will be raised at the regional level PMO forum. If there are still problems, they will be appointed to the central level PMO. To ensure the achievement of policy targets, within each PMO level a task delegation mechanism is regulated

(Fig 5). Communication and coordination mechanisms are carried out every month, both offline and hybrid (offline and online)[11].

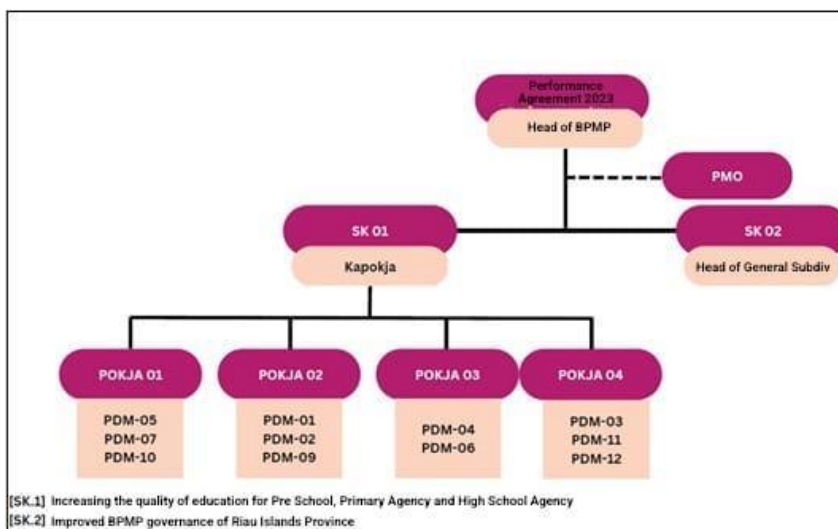


Fig 5. Delegation Coordination Mechanism for achieving BPMP performance

Source: Presentation by BPMP Riau Islands Province, March 8, 2023

Second, through BPMP advocacy with all regional stakeholder approaches. This communication pattern is carried out so that national education policies receive full support from all regional apparatus, in terms of budgetary and non-budgetary regulations. This effort not only involves PMO members in the regions but also other agencies, consisting of government institutions and community groups. The forms of coordination carried out by BPMP in IKM are as follows:

- a. Conduct regular coordination meetings (offline and/or online) between BBPMP (*Balai Besar Penjaminan Mutu Pendidikan*; Center for Education Quality Assurance) or BPMP, and BBGP/BGP to discuss developments, risks, and risk mitigation as well as issues and solutions, led by BPMP;
- b. Escalation of risks and critical issues, either through *the helpdesk* or regular PMO UPT meetings using other media;
- c. Conduct regular PMO meetings with regional authorities to discuss status, conditions and strategies;
- d. Follow up on the results of coordination meetings and PMO according to their role;
- e. Assisting the Regional Government in monitoring the activation of the Belajar.id account, as well as assisting the Regional Government in monitoring teacher learning activities via the *Merdeka Mengajar Platform (PMM) dashboard*;
- f. Hold meetings with the regional government to see the progress of the use of the *Merdeka Mengajar Platform (PMM)* by teachers at schools implementing IKM regularly.

Meanwhile, the general role of the Provincial and Regency/City Education Services in SMEs is as follows:

- a. Establish a team/working group to assist/implement the *Kurikulum Merdeka* independently in the regions, based on the Decree of the Head of the Education Service;
- b. Make adjustments, modifications, or add local strategies that suit regional needs with assistance from BBPMP/BPMP;
- c. Allocate budget and policy support related to the implementation of the *Kurikulum Merdeka*, for example, printing teaching guides/tools, downloading training materials from PMM, allocating support for learning activities in learning communities, etc.;
- d. Encourage and monitor learning community activities as a forum for learning and sharing good practices for teachers and heads of educational units through the community *dashboard*;
- e. Encourage and monitor teachers and heads of educational units for independent learning through the PMM *dashboard* and following the webinar series;
- f. In procuring textbooks, the Regional Government can direct educational units to 1) Obtain digital textbooks through PMM; or 2) Obtain them in print via the *Sistem Informasi Pengadaan Sekolah* (SIPLah; School Procurement Information System), using Regular *Bantuan Operasional Sekolah* (BOS; School operational assistance) funds/BOSDA/foundation funds/independent funds/or other funds;
- g. Coordinate with BBPMP/BPMP regarding development partners and with BBGP/BGP regarding the need for resource persons to share good practices;
- h. Carrying out Monitoring, Evaluation, Reflection, and Learning (MERL) periodically.

The education governance mechanism between the central and regional governments generally refers to Law Number 23 of 2014. This law mandates the division of concurrent affairs between the central government, provincial-level regional governments, and district/city regional governments. Education matters at preschool, elementary school, and middle school levels are the authority of the district/city government, while education matters at high and vocational school and special education levels are the province of the provincial government. In the context of *Merdeka Belajar*, there is a division of authority between the central government and education units. The central government's authority includes curriculum structure, Pancasila student profiles, learning outcomes, learning principles, and assessment. Meanwhile, the authority of regional education units includes the vision, mission, and goals of schools, local policies related to curriculum, learning and assessment processes, development of operational curricula in education units, and development of teaching tools [12].

In general, although the division of tasks, functions, and authority within the organizational framework related to improving the quality of education in the four study loci has gone well. However, several problems were still found, including:

Firstly, there is no technical guidance for activities to encourage programs to improve the quality of education, for example, *Program Sekolah Penggerak* (PSP; the activator school program), which makes it difficult for regions to design the necessary budgets. So far, there has been no PSP model issued by the government that can be referred to nationally. This article tries to reconstruct the PSP model of guidance based on the results of discussions and field findings,

as well as analyzing the guidance that has been prepared by some of the Ministry of Education and Culture's UPTs in the regions (Fig 6).

Second, there are still overlapping programs as a result of coordination that is not yet optimal. For example, there is an overlap in education and training activities to improve the quality of human resources carried out by the Personnel and Human Resources Development Agency (BKPSDM) with the Denpasar City Education Office. BKPSDM carries out curriculum guidance activities, which are also carried out by the Department of Education, Youth and Sports (Disdikpora).

3.2.2. Analysis of Actuating

The implementation elements explored are related to local government initiative and creativity in the use of funds for the development of GTK, as well as the implementation of educational planning.

Based on the findings found in Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, and Bali Province, there are several forms of local government initiative and creativity for the development of Teachers and Education Personnel. *First*, the development of innovative educational programs, such as STEM (*Science, Technology, Engineering, and Mathematics*) programs, *Program Sekolah Penggerak*, *Program Guru Penggerak* (PGP; Activator Teachers Program), project-based education, the use of technology in learning, or programs with an interdisciplinary approach, and so on. *Second*, through teacher and employee skills training activities and professional training such as educational webinar activities.

Apart from the two forms of initiative mentioned above, the regional government of Bali Province has its way of dealing with the shortage of teachers and educational staff, namely: *first*, maximizing the role of universities in Bali Province. To overcome the teacher shortage, the Regional Government invited the Ganesha University of Education (UNDIKSHA) and Swarnadewa University to help schools that lack teachers. Students through the Field Work Practice (PKL) programs are sent to schools. Apart from that, UNDIKSHA continuously sends Faculty of Teacher Training and Education (Fakultas Keguruan dan Ilmu Pendidikan; FKIP) students through the Real Work Study Program (KKN) to teach schools to overcome the teacher shortage.

Furthermore, the Head of the Bali Province BPMP (Education Quality Assurance Center) also informed that there is a retired teacher community called the Serving Teacher Program in Karang Asem Regency. They teach in schools that have a shortage of teachers voluntarily/without pay. The government's efforts to encourage the implementation of coordinated and integrated education planning between the central and regional governments are carried out through discussion and dialogue activities in the Development Planning Technical Coordination Meeting (Rakortekrenbang) and National Development Planning Conference (Musrenbangnas) forums together with several stakeholders, such as The Ministry of National Development Planning/National Development Planning Agency, Ministry of Home Affairs, Ministry of Education and Culture, Provincial Development Planning Agency at Sub-National Level (Bappeda), and related Regional Apparatus Organizations (Organisasi Perangkat Daerah; OPDs).

Based on the findings from the four locations, several obstacles were found related to local government initiatives and creativity in using funds for the development of Teachers and Education Personnel (GTK) and the implementation of educational planning, namely: first, the

small amount of Regional Original Income (PAD). This is supported by 2018 Provincial PAD Realization data from the Ministry of Finance, where the PAD in Gorontalo Province is much lower than Yogyakarta Special Province's PAD, even the other three provinces[13]. The small PAD means that regions do not have the freedom to budget for programs other than the education programs that have been prioritized by them.

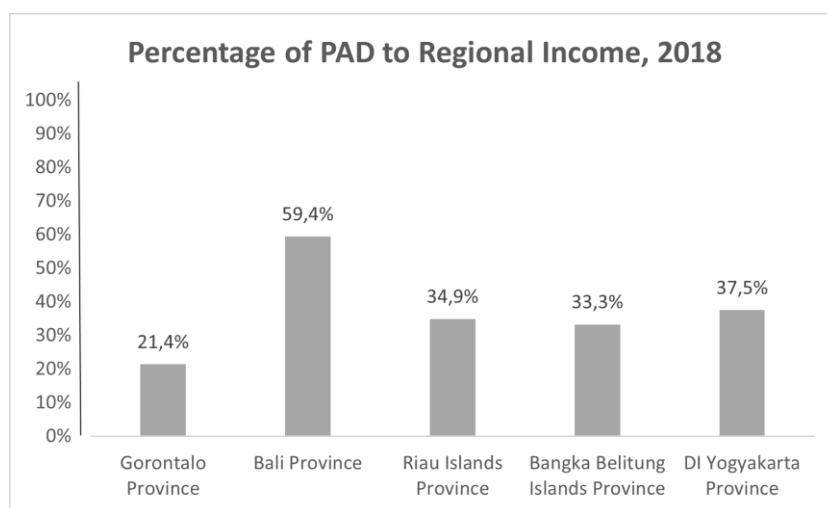


Fig 6. Percentage of PAD to Regional Income 2018

Source: Provincial PAD Realization Data-Ministry of Finance, 2020

The second obstacle is that determining the formation of contract teachers (TGK) and Government Employees with Work Agreements (PPPK) is entirely the authority of the central government which refers to basic education data (Dapodik) that two years before receiving the formation. In fact, in the year of acceptance, the needs for TGK and PPPK have changed. On the one hand, the regional government does not have the authority to place PPPK personnel.

Referring to the Decree of the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Number 349/P/2022 concerning Technical Guidelines for Implementing the Selection of Candidates for Government Employees with Work Agreements for Functional Teacher Positions in Regional Agencies in 2022, it is stated that "Applicants must select the PPPK requirements for functional position of teacher 2022 vacancies are open on the national portal. Selection of functional position of teacher PPPK requirements for priority applicants with the following conditions: a) Priority applicants must register at the school where they are assigned as long as the requirements are available by the teacher's certificate and academic qualifications held; b) If the requirements are not available by the teaching certificate and/or academic qualifications held at the school where they are assigned, priority applicants can register at another school where the requirements are still available." In these field conditions, there were cases of changes in the placement of PPPK teachers which were not by the initial proposal.

3.2.2. Analysis of Controlling

evaluation elements explored are related to the model as well implementation of evaluation and monitoring of education policies jointly between the central and the regions government.

Based on findings from the Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, and Bali Province, it is known that to support the effectiveness of monitoring and evaluating education policies, the central government together with regional governments have implemented several mechanisms whether carried out regularly, whether online, offline or hybrid. This mechanism enables the exchange of information, policy updates, and the sharing of experiences in the implementation of education policies.

The first mechanism is carried out with the Project Management Office (PMO). The PMO mechanism aims to facilitate monitoring and evaluation of the implementation of activity programs, especially so that issues can be resolved and risks can be mitigated. Regional level PMO is carried out regularly with the District/City Education Office every month. PMO activities are a form of evaluation of the implementation of all independent learning policies such as PSP, PGP, and IKM, as well as other independent learning policies. Such efforts will provide synergy between the central and regionals and reduce gaps in misunderstanding in the implementation of policies that have been issued.

One example of how the PMO evaluates the implementation of policies to improve the quality and equality of education is the PSP, as seen in the following picture:

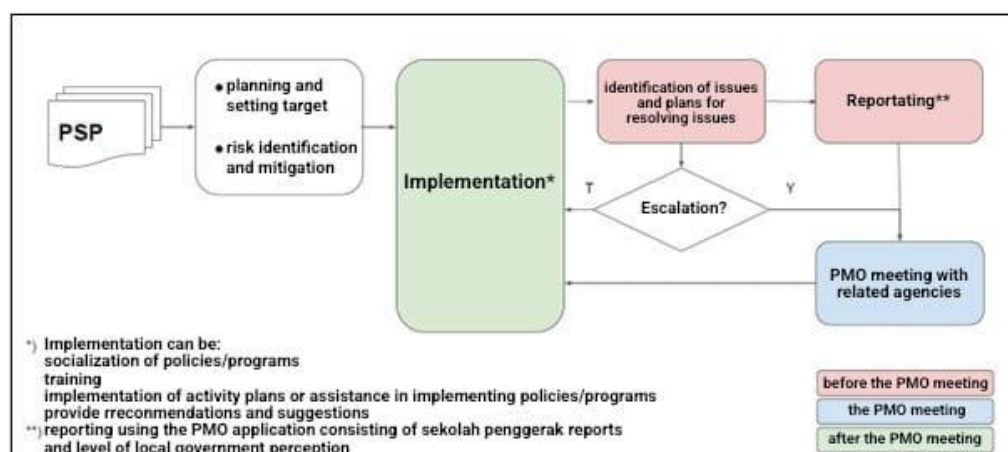


Fig 7. Education Policy Evaluation Model with PMO in the PSP Case

Source: Presentation by BPMP Riau Islands Province, March 8, 2023

As for measuring the quality of education in educational units, the government has implemented a National Assessment policy. The results of the National Assessment can be seen by both education units and local governments through the Ministry of Education and Culture's *Rapor Pendidikan* platform. *Rapor Pendidikan* is a platform that provides evaluation report data for education.

The *Rapor Pendidikan* Platform contains a comprehensive National Assessment results report and holistic cross-sector analysis for each unit of education and government area. The function of *Rapor Pendidikan* is a material reflection and identification of problems for each educational unit and service education, to develop improvement plans more precisely and based on data. With utilization data *Rapor Pendidikan*, direction policy government, order regions, and educational units focus on improving the quality of educational services so that they are more aligned.

National Assessment (AN) is an assessment program for the quality of each school, madrasah, and equality program at the primary and secondary levels. The quality of the educational unit is assessed based on basic student learning outcomes (literacy, numeracy, and character) as well as the quality of the teaching and learning process and the climate of the educational unit Which supports learning. Information the obtained from three instruments main National Assessment, namely Minimum Competency Assessment (AKM), Character Survey, and Learning Environment Survey. AN is attended by all education units at SD/MI/SDLB equivalent, SMP/MTs/SMPLB equivalent, SMA/MA/SMALB equivalent, and SMK/MAK.

In the National Assessment, AKM is a type of assessment carried out by the Ministry of Education and Culture to determine students' minimum competency in the field of literacy and numeracy, which is a basic ability or competency required by all students. This assessment is carried out to determine the quality of education and to provide input to related parties to carry out educational interventions according to the conditions school. Literacy and numeracy are competence that needs to be developed in a way across subjects.

Obstacles in implementing education policy evaluation in the regions of Bangka Belitung Islands Province, Riau Islands Province, Bali Province, and Gorontalo Province are as follows:

- a. Limited resources, both funds and quality of human resources;
- b. Not all regions have sufficient administrative and technical capacity to manage education programs effectively. This includes the ability to collect and analyze data, as well as plan and implement educational quality improvement initiatives;
- c. The role of the community in monitoring and evaluating the quality of education in the region is still limited. Limited understanding and involvement of the community can reduce accountability and transparency in policy implementation;
- d. Political instability and changes in regional leadership can affect the continuity of educational programs. Program priorities and focus can change as regional policies and leaders change;
- e. Accurate and reliable data collection is the basis for effective monitoring and evaluation. Not all regions have a good system for collecting, storing, and managing education data.

Socialization regarding the use of the Class Minimum Competency Assessment (AKM) *platform* has not yet reached all regions of Indonesia. Apart from that, several schools are still constrained by the availability of adequate equipment for implementing AN

3.3 Lessons Learned from Yogyakarta Special Province

Among the key factors for Yogyakarta Special Province's success in improving the quality of education, especially related to educational management elements for improving the quality of learning outcomes, are the organizing and actuating elements. The organizing aspect in question is related to coordination between the central government and regional governments to improve the quality of education, especially the zoning policy regulated through Minister of Education and Culture Regulation Number 17 of 2017 concerning the Admission of New Students (*Penerimaan Peserta Didik Baru*; PPDB) in Yogyakarta Special Province, which is running well [14]. The PPDB policy objective is to improve access to and quality of educational services and control the quality of graduates by monitoring the learning process and outcomes. The implementation of zoning policies in Yogyakarta Special Province as measured using the Edward III model which includes aspects of communication, implementation, target groups,

resources, disposition, and bureaucratic structure is going well [14][15]. This means that the central government's policy regarding PPDB is supported comprehensively by Yogyakarta Special Province, this has finally borne fruit because after PPDB is running, the condition of student output as seen from the average of the 2016 to 2019 national exams tends to increase. Changes in student input and changes in the calculation of passing scores have an impact on academic and non-academic achievements

Apart from the organizing element, another management element that is a key factor for Yogyakarta Special Province in improving the quality of education, especially numeracy competency, is related to the actuating element, especially the initiative and creativity of local governments to improve the quality of education. In this aspect, lessons learned from Yogyakarta Special Province, relate to the implementation of ASPD (Regional Education Standardization Assessment) policies. Even though since 2020/2021, the national exam policy has been removed, the Yogyakarta Special Province Government still maintains the ASPD for junior high school students who will move up to high school. The reason the Yogyakarta Special Province government continues to use ASPD despite this is not only because the geographical location of schools in Yogyakarta Special Province is not evenly distributed, but also because the capacity of SMA/SMK throughout Yogyakarta Special Province does not match the number of junior high school graduates each year. In 2023, the number of junior high school graduates will be around 55 thousand, while available vocational/high school graduates throughout Yogyakarta Special Province are only 32 thousand [16] [17] [18]

The ASPD policy and its support for the PPDB policy are among the key factors for Yogyakarta Special Province's success in having better numeracy competency, especially at the high school level compared to other regions, this is as shown in the 2023 Education Report Card data which is the result of the 2022 national assessment).

4 Conclusion

Based on the findings in the Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, and Bali Province, it can be concluded that there are problems in each management element. This is an obstacle in efforts to improve the quality of education in Indonesia. On the other hand, Yogyakarta Special Province has several advantages that can be lessons learned for other regions. The following are improvements that can be made to each management element, referring to the good practices that exist in Yogyakarta Special Province which are relatively more successful.

1. In the planning element, it was found that the determination of educational programs from the central government was still not in line with regional programs. Regional planning is often decided before the central program is determined. To overcome this, a strategy for aligning education program planning between the central and the regional is needed, for example by implementing a reward and punishment system for fulfilling the SPM in the education sector. This can be done through a mechanism for the amount of the DAU budget allocation that will be given to the regions. The greater the regional budget allocation for fulfilling the SPM in the education sector in the Regional Education Agency's Budget Implementation Document (DPA) in the current year, the greater the opportunity to obtain an additional DAU portion in the following year;

2. In the organizing element, one of the aspects that makes it difficult for regions to design the necessary budgets, especially for efforts to encourage SMEs through the PSP program, is the lack of models or technical guidelines for stimulating activities. For this reason, it is necessary to accelerate the provision of guidance on modeling models (implementation instructions and technical instructions). The technical guidelines must clearly describe coordination between all stakeholders, namely between the Central Government, UPT Kemendikbudristek namely BPMP and BGP, the Education Authorities, Education Units, and even education foundations;
3. In the actuating element, there is a problem of a shortage of contract teachers (TGK) and Government Employees with Work Agreements (PPPK) who are fully under the authority of the central government. Therefore, synchronization is needed between regional needs and the formations opened by the central government. Regional governments need to update DAPODIK data, especially data on GTK needs in the regions. In this way, the central government will refer to the latest data, especially when compiling the employee formations needed by the regions;
4. In the evaluation element, there were problems with internet infrastructure support and GTK's ability to operate computers. These are needed for the use of the independent learning platform and in the Minimum Competency Assessment (AKM). Therefore, the central government and regional governments need to strengthen technical monitoring and evaluation teams consisting of elements from regional governments and BPMP;
5. Learning from Yogyakarta Special Province, regional governments need to increase their synergy with the central government in all operational policy support needed for the effectiveness of policies to improve and equalize the quality of education, especially in the policy of the Minister of Education and Culture Regulation Number 17 of 2017 concerning Acceptance of New Students (PPDB).
6. Apart from supporting PPDB policies, and looking at Yogyakarta Special Province's success, regional governments need to increase their initiative and creativity in translating central policies while still paying attention to regional uniqueness and needs to achieve the expected quality of education.

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5 References

- [1] [1] M. Kristiawan, D. Safitri, and R. Lestari, *Manajemen Pendidikan*. Yogyakarta: Deepublish, 2017.
- [2] G. R. Terry and L. W. Rue, *Principles of Management*. Homewood: Dow Jones Irwin, 1982.

- [3] Organization for Economic Co-operation and Development and C. R. and T. The Ministry of Education, "PENDIDIKAN DI INDONESIA."
- [4] Indonesian Central Bureau of Statistics, "Angka Partisipasi Kasar (A P K), 2021-2022."
- [5] John W. Creswell, *Educational Research*. 2012.
- [6] L. J. Moleong, *Metodologi penelitian kualitatif*. Bandung: Remaja Rosdakarya, 2007.
- [7] Indonesian Central Bureau of Statistics, "Angka Partisipasi Sekolah (A P S) 2020-2022," <https://www.bps.go.id/indicator/28/301/1/angka-partisipasi-sekolah-a-p-s-.html>.
- [8] Sukarna, *Dasar-Dasar Manajemen*. Bandung: Mandar Maju, 2011.
- [9] Ministry of Education, Culture, Research and Technology, *Rapor Pendidikan*. Jakarta: Ministry of Education, Culture, Research and Technology, 2023.
- [10] Ministry of Education, Culture, Research and Technology, "Ministry of Education and Culture Strategic Plan," Jakarta: Ministry of Education, Culture, Research and Technology, 2022.
- [11] BPMP Riau Islands Province, "Presentation by BPMP Riau Islands Province." Mar. 08, 2023.
- [12] Ministry of Research, Technology and Higher Education Indonesia, "Presentation by Ministry of Research, Technology and Higher Education Indonesia." 2023.
- [13] Ministry of Finance, "Provincial PAD Realization Data." Accessed: Dec. 14, 2023. [Online]. Available: <https://djpk.kemenkeu.go.id/wp-content/uploads/2021/08/154.-Data-Realisasi-PAD-Provinsi-di-Indonesia-2013-2018.xlsx>
- [14] S. A. Putri, "IMPLEMENTASI KEBIJAKAN PENERIMAAN PESERTA DIDIK BARU (PPDB) ZONASI DI SMA NEGERI 3 YOGYAKARTA THE IMPLEMENTATION OF THE ZONING SYSTEM FOR STUDENT ENROLMENT POLICY AT SMA NEGERI 3 YOGYAKARTA," *Jurnal Spektrum Analisis Kebijakan Pendidikan*, vol. 11, no. 4, pp. 59–72.
- [15] F. M. Camalia, T. Yuniningsih, and I. H. Dwimawanti, "KEBIJAKAN SEKTOR PENDIDIKAN DI DAERAH ISTIMEWA YOGYAKARTA DALAM PENCEGAHAN PERSEBARAN COVID-19," *Jurnal Litbang Sukowati: Media Penelitian dan Pengembangan*, vol. 5, no. 2, pp. 59–73, May 2022, doi: 10.32630/sukowati.v5i2.277.
- [16] rejogja.republika.co.id, "Nadiem Kritik ASPD DIY, Dewan: Kebijakan Lokal yang Masih Diperlukan," <https://rejogja.republika.co.id/berita/rvm2cr399/nadiem-kritik-aspd-diy-dewan-kebijakan-lokal-yang-masih-diperlukan>.
- [17] Kompas.com, "Ini Alasan Disdikpora DIY Masih Gunakan Nilai ASPD untuk Seleksi PPDB," <https://regional.kompas.com/read/2023/06/03/070000078/ini-alasan-disdikpora-diy-masih-gunakan-nilai-aspd-untuk-seleksi-ppdb>.
- [18] Wulandari, S. Wibawa, A. F. Nisa, and Muh. Arafik, "Digitalisasi Assesmen di Sekolah Dasar di Era 4.0," in *Prosiding Seminar Nasional Pendidikan Guru Sekolah Dasar 2022*, 2022, pp. 165–169. [17] F. Shoviantari, Z. Liziarmezilia, A. Bahing, and L. Agustina, "Uji Aktivitas Tonik Rambut Nanoemulsi Minyak Kemiri (Aleurites moluccana

- L.),” *J. Farm. DAN ILMU KEFARMASIAN Indones.*, vol. 6, no. 2, p. 69, Mar. 2020, doi: 10.20473/jfiki.v6i22019.69-73.
- [18] Ariestya Arlene, “EKSTRAKSI KEMIRI DENGAN METODE SOXHLET DAN KARAKTERISASI MINYAK KEMIRI,” *J. Tek. Kim. USU*, vol. 2, no. 2, pp. 6–10, Jun. 2013, doi: 10.32734/jtk.v2i2.1430.
- [19] A. Widyasanti and J. M. Rohani, “The making of transparent soap based on olive oil with the addition of white tea extract,” *J. Sains Teh Dan Kina*, vol. 20, no. 1, pp. 13–29, Sep. 2017, doi: 10.22302/pptk.jur.jptk.v20i1.124.
- [20] Gusti Ayu Dewi Lestari, “PENYULUHAN DAN PELATIHAN PEMBUATAN SABUN PADAT ORGANIK DI DESA PEGUYANGAN DENPASAR,” *Din. J. Pengabd. Kpd. Masy.*, vol. 5, no. 1, Nov. 2020, doi: 10.31849/dinamisia.v5i1.4645.
- [21] R. Witular, “Pengaruh Perbandingan Campuran Minyak Sawit dan Ekstrak Biji Teh Terhadap Mutu Sabun Padat,” *Dr. Diss. Teknol. Ind. Pertan.*, 2021.
- [22] L. Marlina and I. Herawati, “PENGARUH VARIASI KONSENTRASI SODA KAUSTIK DAN EKSTRAK KULIT PISANG AMBON (*Musa paradisiaca*) TERHADAP MUTU SABUN KESEHATAN,” vol. 16, no. 2, 2022.
- [23] E. Yuliana, “BAGIAN FARMASETIKA FARMASI FAKULTAS FARMASI UNIVERSITAS JEMBER,” 2019.
- [24] E. F. Agustin and N. Hendrawati, “PENGARUH VARIASI NATRIUM HIDROKSIDA (NaOH) TERHADAP PEMBUATAN SABUN MANDI PADAT SARI MENTIMUN,” *DISTILAT J. Teknol. Separasi*, vol. 8, no. 4, pp. 850–858, May 2023, doi: 10.33795/distilat.v8i4.471.
- [25] R. Tungadi, M. Madania, and B. H. Aini, “Formulasi dan Evaluasi Sabun Padat Transparan dari Ekstrak Bunga Rosella (*Hibiscus sabdariffa* L.),” *Indones. J. Pharm. Educ.*, vol. 2, no. 2, pp. 117–124, Jul. 2022, doi: 10.37311/ijpe.v2i2.14060.
- [26] F. Yansen and V. Humaira, “Uji Mutu Sediaan Sabun Padat dari Ekstrak Lidah Buaya (*Aloe vera*),” *J. Kesehat. PERINTIS Perintiss Health J.*, vol. 9, no. 2, pp. 82–88, Dec. 2022, doi: 10.33653/jkp.v9i2.883.
- [27] D. Camila, A. M. Ulfa, and V. Elsyana, “FORMULASI DAN UJI ANTIBAKTERI SEDIAAN SABUN CAIR ANTISEPTIK EKSTRAK ETANOL BUNGA TELANG (*Clitoria ternatea* L.) TERHADAP *Staphylococcus aureus*,” *J. Ilmu Kedokt. Dan Kesehat.*, vol. 9, no. 2, Jun. 2022, doi: 10.33024/jikk.v9i2.5637.
- [28] Dewi Rashati, Dewi Riskha Nurmalasari, and Vira Ananda Putri, “PENGARUH VARIASI KONSENTRASI NaOH TERHADAP SIFAT FISIK SABUN PADAT EKSTRAK UBI JALAR UNGU (*Ipomoea batatas* Lam),” *J. Ilm. Manuntung*, vol. 8, no. 2, pp. 311–316, Dec. 2022, doi: 10.51352/jim.v8i2.635.
- [29] dkk Gusviputri, “Pembuatan Sabun Mandi Dengan Lidah Buaya (*Aloe Vera*) Sebagai Antiseptik,” *J. Widya Manggala*, 2013.
- [30] R. Rizka, “FORMULASI SABUN PADAT KAOLIN PENYUCI NAJIS MUGHALLADZAH DENGAN VARIASI KONSENTRASI MINYAK KELAPA DAN ASAM STEARAT,” 2017.

- [31] I. Yulia Agtalis, "Formulasi Sediaan Sabun Mandi Padat Ekstrak Etanol Daun Afrika (*Vernonia Amygdalina* Del)," *Dr. Diss. Poltekkes Kemenkes Kupang*, 2018.
- [32] P. P. A. L. Dewi and E. I. Setyawan, "Pengaruh Konsentrasi NaOH dan Waktu Pengadukan terhadap Karakteristik Sabun Pada Opaque Lidah Buaya (*Aloe vera* L.)," *Pros. Workshop Dan Semin. Nas. Farm.*, vol. 1, pp. 1–12, Jan. 2023, doi: 10.24843/WSNF.2022.v01.i01.p01.
- [33] S. Fatimah, U. Nurul Marfu'ah, and A. Abadi Kiswandono, "FORMULA SABUN SUSU SAPI DENGAN PENAMBAHAN EKSTRAK DAUN CENGKEH," *Anal. Environ. Chem.*, vol. 6, no. 01, pp. 56–65, Apr. 2021, doi: 10.23960/aec.v6.i1.2021.p56-65.
- [34] I Gusti Ayu Istri Praminingrat Aryadi, "Pengaruh Ekstrak Daun Mengkudu terhadap Pertumbuhan *Staphylococcus aureus* sebagai Penyebab Abses Periodontal secara in vitro," Universitas Mahasaraswati, 2014.
- [35] J. Jalaluddin, A. Aji, and S. Nuriani, "Pemanfaatan Minyak Sereh (*Cymbopogon nardus* L) sebagai Antioksidan pada Sabun Mandi Padat," *J. Teknol. Kim. Unimal*, vol. 7, no. 1, p. 52, Jan. 2019, doi: 10.29103/jtku.v7i1.1170.
- [36] H. Sasongko and A. S. Mumpuni, "Pengaruh penambahan sukrosa terhadap mutu sabun transparan dari ekstrak etanol herba pegagan (*Centella asiatica* L.)," *Pharmaciana*, vol. 7, no. 1, p. 71, May 2017, doi: 10.12928/pharmaciana.v7i1.5795.
- [37] E. Lestari, "Penambahan Serbuk Daun Pegagan terhadap Karakteristik Sabun Padat".
- [38] G. Sukriyatun, "Pendidikan Karakter pada Kurikulum 2013 dan Perkembangannya Menuju Profil Pelajar Pancasila," *Primer Edukasi J.*, vol. 1, no. 2, pp. 78–91, Sep. 2022, doi: 10.56406/jpe.v1i2.96.05 PM.