Strengthening Penta Helix Collaboration for Enhancement Quality of Education
(Case Study: Synergy of Education Quality Improvement Program in Gorontalo Province, Riau Islands Province, Bali Province and Bangka Belitung Islands Province, Indonesia)

Wabilia Husnah
National Research and Innovation Agency, Indonesia
Email: Wabi001@brin.go.id

Muhammad Athar Ismail Muzakir
Universitas Islam Syekh Yusuf Tangerang, Indonesia
National Research and Innovation Agency, Indonesia
Email: Mimuzakir@unis.ac.id

Trida Chairu
National Research and Innovation Agency, Indonesia
Email: Trid001@brin

Choiruddin
National Research and Innovation Agency, Indonesia
Email: Choi001@brin.go.id

Eka Aulia Ardianti
National Research and Innovation Agency, Indonesia
Email: Ekaa003@brin.go.id

Karnadi
National Research and Innovation Agency, Indonesia
Email: Karnadi1508@gmail.com

Radiwan
Ibn Chaldun University, Indonesia
Email: Radiwan04@gmail.com

Abstract

This study aims to reconstruct synergy between all penta helix actors, to improve educational quality. To answer this problem, we use qualitative research with a case studies approach in Riau Islands province, Bangka Belitung Islands province, Bali province, and Gorontalo province. This study discovered synergy between all Penta Helix actors, including central government, regional government, business sector, education sector, society, and media. However, there are several barriers to implementing this synergy. As a result, this study recommends strengthening synergy between institutions at the central level of government (Ministry of Home Affairs and Ministry of Education, Culture, Research, and Technology), Regional Apparatus Organizations (OPD) in provincial and district governments, and all Penta
Helix actors. The implications of this study could be used to improve education quality in Indonesia.

**Keywords**: authority, penta helix, quality of education, stakeholders, synergy.

1. Introduction

Quality of education is fundamental for a country's economic development (Takaya, 2013). But of course, efforts to maintain and improve the quality of education are not only the state's responsibility. Synergy is also needed between all stakeholders, such as between the central government, regional government, business world, educational institutions, society, and the media (Suroto et al., 2023; Muhyi et al., 2017) Educational Standards, 2021). This synergistic concept is known as the penta helix concept (Lindmark et al., 2009, page 24).

In the national policy, the demand for synergy is increasingly high, considering that with the enactment of Law Number 23 of 2014 concerning Local Government. This law regulates the authority between the Central Government and Regional Governments in educational matters. In Article 1 paragraph 6 of the Law, it is stated that Regional Autonomy is the right, authority, and obligation of autonomous regions to regulate and manage their government affairs and the interests of local communities in the system of the Unitary State of the Republic of Indonesia. The law regulates what authorities the central and regional governments have, including in the education sector (Wijayanti, 2016).

Several studies show how synergy between all penta helix actors is needed to improve the quality of education. Suroto et al. (2023) in their research entitled Konsep Penta Helix Sebagai Upaya Optimalisasi Manajemen Mutu dan Lulusan SMK, for example, found that by implementing the penta helix concept, schools need to collaborate with all parties to support strengthening skills and absorbing graduates. Meanwhile, research by Budiman et al. (2022) entitled Implementasi Program Sekolah Penggerak (PSP) Tahun 2021 Di SDN 23 Menyumbung Kabupaten Sintang, Kalimantan Barat found that the success of the Program Sekolah Penggerak for improving the quality of education requires internal support such as attitude, commitment, and managerial competence of school principals, performance and teachers' positive response to changes in education policies, and parental support through the school committee, as well as school conditions related to electricity and internet networks. Apart from that, attaining the quality of education also requires the support of external factors such as industry, local government and society.

Apart from that, Maulan (2022) in her Policy Brief entitled Kesenjangan Mutu Pendidikan di Wilayah Timur Indonesia recommends that to reduce the education quality gap in the eastern region of Indonesia it is necessary to strengthen infrastructure and improve the quality of teachers. Improving teacher quality can be done by strengthening community support, especially through strengthening the role of school committees based on local culture. Before Maulan, (Pratiwi & Utama (2021) research with the title Kesenjangan Kualitas Layanan Pendidikan di Indonesia Pada Masa Darurat Covid-19: Telaah Demografi Atas Implementasi Kebijakan Belajar dari Rumah (BDR) also found that adapting the learning process from home can run well with adequate use of the internet and digital devices and is supported by teachers and students who are skilled in using digital devices. The learning process is carried out through classes in virtual space (interactive virtual classroom) and optimizing online learning applications (online classroom). These findings confirm that media support, both the existence of infrastructure and the ability to operate them, is an important aspect of improving the quality and equal distribution of access to education.

in Central Sulawesi Province found that the implementation of New Student Admissions (Penerimaan Peserta Didik Baru; PPDB) as an effort to improve the quality and equal distribution of access to education requires the support of all parties. They are the government, the regional business sector, and the community (especially student parents). Apart from that, media support for the socialization of the PPDB program is important so that the public can understand the objectives of the zoning system. Meanwhile, Sudrajat (2014), in his research entitled Implementasi Kebijakan Pemberdayaan Dosen dan Profesionalitas Birokrasi Perguruan Tinggi Swasta, found that the implementation of the Tridharma of Higher Education through the implementation of lecturer empowerment policies is greatly influenced by the extent to which there is policy harmony between national levels, ministries, and university level policies.

These several studies prove how the improving the quality of education really requires synergy between all penta helix actors. Both the central government, regional government, business world, education world, and society are needed in efforts to improve the quality and equal distribution of access to education in Indonesia. The role of the media as a channel for information and socialization and as a means of teaching and learning activities cannot be ignored. This research aims to reconstruct the cooperation needed to improve the quality of education in the region.

2. Research Methods

A qualitative approach was used in this research. The qualitative method is a process of inquiry (questioning/investigating) regarding the understanding of something to obtain data, information, and texts of respondents' views on a problem or social or humanitarian phenomenon using various methodologies (Creswell, 2012). This qualitative approach yields descriptive data in the form of written and spoken words from people, as well as observed behavior (Moleong, 2007). In this study, a qualitative approach was used to collect data and information about education management in the region, from planning, organizing, and implementing to evaluating. Aside from that, data and information on the synergy between the central and regional governments in improving educational quality were gathered.

The aspect of central and regional synergy in improving the quality of education seen in this research is the integration between educational programs run by the central government and regional governments, as well as the coordination mechanisms implemented between the central government and regional governments in education budget planning allocations and their consistency. Apart from that, this research also looks at the active involvement of the community and other stakeholders (such as the Education Council, universities, or the business world) in the education governance process in the regions, as well as obstacles to central and regional synergy in improving the quality of education.

Case studies were conducted in five different provinces: Bangka Belitung Islands Province, Riau Islands Province, Gorontalo Province, Bali Province, and Yogyakarta Special Province. Because of its high PISA score in 2018, Yogyakarta Special Province was chosen as a comparison area. The other four locations were chosen based on the School Participation Rate (Angka Partisipasi Sekolah; APS) of students aged 16 to 18 in these areas. According to Government Regulation (PP) Number 2 of 2018 concerning Minimum Service Standards (Standar Pelayanan Minimum; SPM), the level of access to education is the main component of the Minimum Service Standards.

According to data from the National Socioeconomic Survey (Survei Sosial Ekonomi Nasional; Susenas) for 2020-2022, there is a disparity in the School Participation Rate at the Senior High School level for students aged 16-18 years (Indonesian Central Bureau of Statistics, 2023). This level of access undoubtedly influences efforts to improve educational
quality. The Senior High School School Participation Rate was chosen because it demonstrates more pronounced disparities than the Junior High School and Elementary School School Participation Rates. Furthermore, high school students are prepared to become prospective students who will pursue higher education, resulting in high-quality, competitive higher education human resources.

Furthermore, according to the Indonesian Central Bureau of Statistics' National Socioeconomic Survey for 2020-2022, the school participation rate for students aged 16 to 18 in the Bangka Belitung Islands Province in 2022 was 68.42%. Meanwhile, the School Participation Rate in the Riau Islands Province, which is both an archipelagic province and located in western Indonesia, was 84.54% (Indonesian Central Bureau of Statistics, 2023). School Participation Rates differ significantly between the Riau Islands Province and the Bangka Belitung Islands Province, despite having nearly identical regional characteristics. Furthermore, Gorontalo Province, located in central Indonesia, has a school participation rate of 71.68%. Meanwhile, in Central Indonesia, Bali Province has a higher School Participation Rate, at 83.84% (Indonesian Central Bureau of Statistics, 2023).

Data analysis is used for further data processing and to search for data and information that is useful for research. This can be used as a basis for decision-making to resolve existing problems. This analysis process includes data grouping activities based on their characteristics, data transformation, data intervention, and the creation of data models to search for information and data.

3. Results and Discussion

In this research, the synergy aspect includes the integration of central and regional education programs, coordination of central and regional governments, involvement of stakeholders in education governance, as well as obstacles to the synergy of central and regional policies in improving the quality of education.

Based on the observations, it is known that the scope of basic services, especially education, includes two aspects. These two aspects are Minimum Service Standards (Standar Pelayanan Minimal; SPM) and Norms, Standards, Procedures, and Criteria (Norma, Standar, Prosedur, dan Kriteria; NSPK). All educational programs in the regions have referred to the fulfillment of SPM. From the program planning aspect, to encourage the achievement of SPM indicators, the Education Quality Assurance Center (Balai Penjaminan Mutu Pendidikan; BPMP) carries out assistance activities in the preparation of regional work plans (Rencana...
Kerja; Renja). This mentoring activity is carried out jointly with the Regional Development Planning Agency (Badan Perencanaan Pembangunan Daerah; Bappeda), as well as the planning section of the District Education Office.

Coordination between the central and regional governments in terms of education budget planning allocations is generally carried out jointly between the BPMP and regional governments at the district and provincial levels. BPMP which is the Technical Implementation Unit of the Ministry of Education and Culture in the regions. BPMP coordinates budget planning allocations based on e-Rakortek input.

For example, in the Bangka Belitung Islands Province, the Technical Implementation Unit (Unit Pelaksana Teknis; UPT) of the BPMP has coordinated with the Bangka Belitung Islands Provincial Government. The UPT of the BPMP also strives to always be involved in data-based planning activities at the Regional Development Planning Conference (Musyawarah Perencanaan Pembangunan Daerah; Musrenbangda). This is a form of BPMP's efforts as an extension of the central government in the regions to synergize with regional governments, in this case, the Bangka Belitung Islands Provincial Government.

BPMP also encourages regions to issue Governor Regulations (Peraturan Gubernur; Pergub) and Regent/Mayor Regulations (Peraturan Bupati/ Wali Kota; Perbup and Perwal) for the sustainability of programs to improve the quality of education in the regions. This was done as an effort to maintain consistency and sustainability of educational policy coordination between the central and regional governments. One example is the self-driving school program. Central government intervention in the form of regulations, budgets, and Project Management Office (PMO) assistance for the Program Sekolah Penggerak, to support the implementation of the Independent Curriculum (Implementasi Kurikulum Merdeka; IKM) is only up to the third year. Furthermore, the central government expects regional governments to take over the program independently in the fourth year (Center for Policy Research-Ministry of Education and Culture, 2020).

Table 1. Table SPM Indicators for Provincial and District /City Education Sectors
Apart from central and regional synergy, what is no less important is collaboration between Regional Work Units (Satuan Kerja Perangkat Daerah; SKPD) in the regions, such as providing data coordinated by the Communications and Information Service. Likewise, the collaboration between local governments and related parties such as the Dewan Pendidikan, Universities, and the business world. This collaboration is already underway in the form of assistance with planning the preparation of educational curricula in the regions, assistance with teaching staff, educational facilities, scholarships, and training to improve student skills.

Even though it is not yet optimal, the involvement of higher education in the education governance process has been seen in the research locus. The involvement of universities in synergizing for the advancement of education in the region has been intensively encouraged through one of the points of the Tridarma of Higher Education, namely community service. This is regulated by the Ministry of Education, Culture, Research, and Technology's policy regarding the Teaching Campus (Kampus Mengajar) program. The Teaching Campus aims to provide students with the opportunity to study outside the classroom for one semester as teacher partners who are distributed to various regions. The placement of students to become educational staff in educational units that experience limited numbers of teachers is a form of commitment and cooperation between universities and the regional government to improve the quality of education. One of them was found in Bali Province.

Based on the field findings at the research locus, it is known that the involvement of the Education Council has not been optimal. In fact, in one of the research locus, some still don't know what the Dewan Pendidikan is. The formation of the Dewan Pendidikan is a mandate of Law Number 20 of 2003 concerning the National Education System. Article 56 paragraph (4)
in the law states that "the provisions regarding the formation of education councils and school/madrasah committees.

Barriers to synergy between the center and regions can occur, among others, as follows:

a. Lack of coordination can lead to overlapping educational programs or even policy conflicts;

b. Lack of effective communication between central and regional governments, as well as between various parties in the education sector, can hamper the exchange of information that is important to support policy synergy;

c. An imbalance between resource support from the central government and the ability of local governments to manage and implement educational programs can hamper synergy. Limited resources can cause local governments to focus more on meeting basic needs rather than improving the quality of education;

d. Unclearness or differences in interpretation regarding regulations and laws between the central and regional governments can cause obstacles in the harmonization of education policies.

To overcome these obstacles, central and regional governments need to establish good communication, formulate harmonized policies, build the capacity of relevant agencies, and involve various related parties in planning and implementing educational programs.

4. Conclusions and Recommendations
4.1. Conclusion

Based on the results and discussion, the following conclusions can be drawn:

a. Regional Education Programs have referred to PP Number 2 of 2018 concerning Minimum Service Standards (SPM) and Minister of Home Affairs Regulation Number 100 of 2018 concerning the Implementation of Minimum Standards. To fulfill the SPM, the Minister of Education, Culture, Research and Technology issued a Circular Letter of the Minister Education, Culture, Research and Technology Number 5676/MPK.A/ PR. 07.05/2023 to Governors, Regents/Mayors throughout Indonesia regarding provincial and district Education Performance Indicators, which consists of the quality of learning outcomes, learning environment climate, quality of vocational school graduates, quality of pre-school services and school access/enrollment rates. Meanwhile, budgeting support in achieving SPM indicators from the research focuses still varies;

b. Coordination between the central and regional governments in terms of education budget planning and allocation is generally carried out jointly between the BPMP which is the representative of the central government (Ministry of Education, Culture, Research, and Technology) and regional governments, both at the district and provincial levels. BPMP coordinates and advocates with local governments regarding education budget planning and allocation;

c. In maintaining consistency and sustainability of education policy coordination between the central and regional governments, BPMP seeks to encourage regions to provide support for the sustainability of regional education quality improvement programs.

d. The intensity of active involvement of the community (Dewan Pendidikan, Universities, and the business world) in the education governance process in the regions of the four locations varies, some are still low and some are already high, such as in Bali Province and Riau Islands Province;

e. Cooperation between the Ministry of Home Affairs and the Ministry of Education,
Culture, Research and Technology in terms of providing data on school-age children who are not in school is still weak. The availability of this data is very important both as a basis for education policy-making at the central and regional levels;

f. The Synergy Pattern has worked very well in the study locus, especially in the City of Denpasar-Bali. A well-developed synergy pattern is not only between the regional government and the central government/BPMP but also between Regional Apparatus Organizations (OPD) under the Denpasar City Government;

4.2. Recommendations

Based on the results of the discussion and conclusions, it can be recommended as follows:

a. It is necessary to align the planning of education quality improvement programs between the central and regional governments by implementing a reward and punishment system to fulfill the Minimum Service Standards (SPM) in the field of education. This can be done through a mechanism for the amount of the General Allocation Fund which will be given to the regions.

b. To increase the effectiveness of program implementation, especially programs delegated from the center to the regions, the role of the governor as a representative of the central government in the implementation of education in the regions needs to be strengthened.

c. The Ministry of Education, Culture, Research, and Technology needs to accelerate the provision of guidance on modeling models (implementation instructions and technical instructions), especially for PSP.

d. Regional governments need to encourage the active role of education development partners in their regions, such as the Dewan Pendidikan and the business and industrial world in supporting the sustainability of programs to improve the quality of education in the regions by involving development partners in every policy formulation in the education sector. Apart from that, the Regional Government also needs to encourage and increase the involvement of the business and industrial world through strengthening the MoU so that it can help programs to improve the quality of education, through internship, training, and scholarship programs (students, teachers, and staff) and the provision of educational infrastructure.

e. The Ministry of Home Affairs, the Ministry of Education, Culture, Research, and Technology, the Central Bureau of Statistics, and the Ministry of Social Affairs need to make a Joint Decree to provide integrated data regarding school-age children who are not in school. This data is needed to strengthen data-based planning so that the implementation of education policies is right on target.

f. To accelerate improvements in the quality of education in Indonesia, it is necessary to strengthen the synergy pattern between the central and regional governments. Apart from that, it is also necessary to strengthen synergy between institutions at the central government level (The Ministry of Home Affairs and the Ministry of Education, Culture, Research, and Technology), as well as between Regional Apparatus Organizations (OPD) in regional governments, both provincial and district governments.
References


Government Regulation Number 17 of 2010 concerning the Management and Implementation of Education


Law Number 23 of 2014 concerning Local Government

Law Number 6 of 2014 concerning Villages

Law Number 20 of 2003 concerning the National Education System


