Nusantara Education

Vol. 2 No. 2, 2023: 72-81
E-ISSN: 2985-329X
https://juna.nusantarajournal.com/index.php/nula/Home

Teacher Professional Development In The Context Of Independent Learning

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Received: 30-10-2023 | *Revised: 15-11-2023* | *Accepted: 21-12-2023* | *Published On: 24-12-2023*

Abstract: To improve the quality of education and anticipate the demands of competence and learning in the era of the Industrial Revolution 4.0, The Ministry of Education and Culture of the Republic of Indonesia launched a policy known as "Merdeka Belajar"(Freedom for Learning"). The essence of Merdeka Belajar is to explore the greatest potential of school teachers and students to innovate and improve the quality of learning independently. Freedom for learning requires teacher "Merdeka Mengajar" (Freedom to Teach), where teachers freely apply their professional autonomy in improving the quality of learning and student learning outcomes. Merdeka Mengajar can only be done by professional teachers and can adapt and face the challenges of science and technological advances throughout their careers. This suggests the need for continuous professional development of teachers so that teachers become as lifelong learner. Teacher professional development must address the problems and needs of teachers in improving student learning processes and outcomes. Therefore, the teacher professional development model that is considered the most appropriate is the school-based teacher professional development. School-based teacher professional development can make teachers as a professional learning community.

Keywords; Freedom, Learning, Teacher Professional.

Abstrak: Untuk meningkatkan kualitas pendidikan dan mengantisipasi tuntutan kompetensi dan belajar di era revolusi industri 4.0, Kementerian Pendidikan dan Kebudayaan Republik Indonesia meluncurkan kebijakan yang dikenal dengan "Merdeka Belajar". Esensi dari merdeka belajar adalah menggali potensi terbesar para guru sekolah dan murid untuk berinovasi dan meningkatkan kualitas pembelajaran secara mandiri. Merdeka Belajar membutuhkan guru 'Merdeka Mengajar" dimana guru secara bebas menerapkan otonomi profesionalnya dalam meningkatkan kualitas pembelajaran dan hasil belajar siswa. Merdeka Mengajar hanya dapat dilakukan oleh guru profesional dan mampu beradaptasi dan menghadapi tantangan-tantangan kemajuan ilmu pengetahuan dan teknologi. Ini mengisyaratkan perlunya pengembangan profesional guru secara berkelanjutan agar guru menjadi pebelajar sepanjang ayat. Pengembangan profesional guru harus benar-benar menyentuh persoalan dan kebutuhan guru dalam meningkatkan proses dan hasil belajar siswa. Oleh karena itu, model pengembangan profesional guru yang dipandang paling sesuai adalah model pengembangan pr1ofesional guru berbasis sekolah. Pengembangan profesional guru berbasis sekokah dapat menjadikan guru-guru sebagai komunitas belajar professional.

Kata Kunci; Merdeka, Belajar, Profesional Guru.

Introduction

Indonesia is currently facing external challenges, namely the era of the Industrial Revolution 4. (RI 4. namely the period of development of science where the boundaries between the physical, digital, and biological worlds are increasingly blurred (Schwab, 2016). McKinsey Global Institute has developed RI 4. to integrate computers, networks, and physical processes, including digital devices, Internet of Things (IoT), artificial intelligence (AI), robotics, cybersecurity, and 3D printing (Buguin et al. 2013). To face RI 4. The World Economic Forum has identified 10 skills needed by 2020. namely, complex problem solving, critical thinking, creativity, human resource management, coordination, emotional intelligence, judgment and decision-making, service orientation, negotiation, and cognitive flexibility (Gray, 2016). RI 4. Impact on the worldof education. Education is an institution that values intelligence and intellectual thinking, utilizes technology-based tools and resources, and allows students to access information and learn online from anywhere (Sarma, 2019). RI Educatorsin era 4. utilize unique technological tools to create a learning environment that provides an educational experience similar to work experience. Therefore, teaching methods in the RI era 4. More realistic and practical, and can providebetter learning results to students.

In addition to external challenges, Indonesia also faces internal challenges in the form of low quality of education and negative impacts from the development of science and technology, especially social media. One indicator of low quality of education that is often referred to is the results of the PISA and TIMSS surveys. In the 2018 PISA survey, the OECD released the average score of Indonesian students in reading 371 which is ranked 72nd out of 77 countries, in mathematics is 379 in 72nd place out of 78 countries, and in science is 389 in 70th place out of 78 countries (Ministry of Education and Culture, 2019). The average score of 15-year-old Indonesian students in math, science, and reading is still below the international average. The results of the TIMSS survey in 2015 showed the average score of Indonesian students in mathematics was 397, which was ranked 45 out of 50 countries. While in the field of science, the average score of Indonesian students is 397, which isranked 45th out of 48 countries (Kusuma, 2017).

In addition to external challenges, Indonesia also faces internal challenges such as low standards of education and the negative impact of science and technology, especially the development of social media. The results of the PISA and TIMSS surveys are often cited as indicators of poor quality of education. In the 2018 PISA survey, the average reading proficiency score of Indonesian students announced by the OECD was 371 points, ranked 72 out of 77 countries, mathematics 379 points, ranked 72 out of 78 countries, and science 70 points out of 78, ranked 389. earlier. 78 countries (Ministry of Education and Culture, 2019). The average scores of 15-year-old Indonesian students in math, science, and reading are still below the international average. Based on the results of the 2015 TIMSS survey, the average mathematics score of Indonesian students is 397 points, ranked 45th out of 50 countries. In the field of science, the average score of Indonesian students is 397, ranked 45th out of 48 countries (Kusuma, 2017).

It is undeniable that social media has had many positive impacts on people's lives, including in the fields of education, health, economy, social problems, children and adolescents, and culture. For example, in the world of education, social media makes it easier for students to interact, share knowledge, learn from various sources, and share emotions.In business, social media can be an invaluable tool for professionals to cementtheir skills, identify business opportunities, and network effectively (Akram & Kumar, 2017). However, social media also has many negative impacts, such as identity fraud, cyberbullying, discriminatory behavior, and a cultureof sharing without checking (Mulawarman &; Nurfitri, 2017). Narcissistic Culture, Behavior Engineering, and Masked Society (Nurudin, 2018). Social media has a negative impact on children and adolescents, including: Too much information can lead tocyberbullying. Put some distance between children and families. Vulnerable to the risk of online predators, pornography, cyberbullying, invasion of privacy, and identity theft.and negative health risks (Triastuti, Prabowo, and Nurul, 2017).

In response to theexternal and internal challenges above, the Ministry of Education and Culture of the Republic of Indonesia announced a policy called "Merdeka Belajar" which is a major step towards improving the quality of education in Indonesia. According to Nadiem Makarim (Education and Culture Department), "The essence of Merdeka Belajar is to explore the maximum potential of teachers and school students, innovate and improve the quality of learning independence." standards of the educational process, but also political cooperation in various aspects, such as curriculum and learning, national education management, local and school education management, and teacher professional development.

Without neglecting other factors, teachers are one of the determinants of education quality (World Bank, 2011). Barber and Mourshed (2007) follow in the footsteps of the World Bank (2011) which emphasizes that "the quality of education cannot exceed the quality of teachers. "The quality of education can be explained by the quality of student learning processes and outcomes. Therefore, the quality of student learning processes and outcomes can be considered as a benchmark for the success of professional teachers (Wardani, 2012). Freedom of learning requires the freedom of teachers to teach. Independent teaching gives teachers autonomy and the ability to performprofessional assessments. This helps create a learning environment that stimulates and sustains students' curiosity and encourages them to think critically, ask questions, and imagine (Forte, 2009). Based on the central role of teachers in independent learning, it is necessary to increase teacher professionalism so that they always adapt to the development of science and technology and the Industrial Revolution era 4.0 as well as being a lifelong learner.

Result and Discussion

The Free Teaching Bell Policy and Its Implications for Teachers

The Minister of Education and Culture of the Republic of Indonesia has established four "freedom of learning" policies, including: "(1) National Standardized School Examination (USBN); (2) National Examination (UN); Implementation" "Plan (RP P) and (4)) Zoning Regulation for New Student Admission (PPDB)" (Ministry of Education and Culture, 2019).

Each of these policies is described below.

1. USBN was replaced with an assessment conducted only by schools.
2. Tests to determine students' abilities can be done in written formats and/or other more comprehensive formats such as portfolios or assignments (group work, written assignments, etc.).
3. This policy reflects teacher independence in assessing student learning outcomes.
4. The National Examination (UN) was changed to a minimum competency assessment and personality survey.
5. National examinations are held for students at the secondary school level (e.g. grades 4, 8, and 11) with the aim of teachers and schools improving the quality of learning, not for students to be used as selection criteria.
6. the next level.
7. This assessment draws on international best practices such as PISA and TIMSS.
8. Teachers are free to choose, create, use, and develop lesson plan formats that contain elements such as learning objectives, learning activities, and assessments.
9. The other components complement each other and can be selected independently.
10. As a result of this policy, teachers will be able to create lesson plans efficiently and effectively,giving them more time and opportunity to prepare and evaluate the learning process themselves.
11. The Zoning PPDB will be implemented flexibly to address regional access and quality gaps. Some benchmarks willmean zoning lines: at least 50%, confirmation lines: at least 15%, forwarding lines: at least 5%, and success paths (the remaining 0-30% adjusted to local conditions). The district has the authority to determine the final proportions and determine thezoning area.

Theabove principles are directly related to teacher competence, including pedagogic, personal, social, and professional competencies (PP No.74 of 2008). Teachers have independence in translating the curriculum into learning content and evaluating the results. Must be innovative in developing curriculum, learning activities, assessment methods/techniques, and tools. Measuring a student's ability includes not only knowledge but also students' skills and attitudes/personalities. Therefore, teachers must be able to develop and implement learning content to achieve these three elements of competence and measure the results. The policy also requires teachers to be able to develop learning and assessment content that requireshigher-order thinking skills required by PISA and TIMSS assessments. In the context of independent learning, teachers must be able to educate students who have different personalities and academic abilities, explore and understand the personality of students, and communicate with students and parents of different socioeconomic status. In other words, teachers need to fully master pedagogic, personal, social and professional abilities

Existing Conditions of Teachers in Indonesia

According to Indonesian education statistics data released by the Central Statistics Agency (BPJS) in 2019 (Ammanullah, 2019), the student-teacher ratio at each level of education is as follows: people (1) Elementary School (SD) 1: people 16 people. (2) Middle School 1: 16; High School 1: 15. Theschool of Vocational Secondary (SMK) is 1: 16. That is, each teacher Indonesian teach 15 to 16 students. In other words, the number of teachers in Indonesia is very sufficient. Of the number of teachers above, as many as 2. 438. 520 teachers (89.86%) qualified D4/S1 in the 2017/2018 school year. In 2018/2019 the number increased to 4. 444,2,599. 375 (89.33%). Although the number is increasing, the percentage tends to stagnate.

This shows that in the 2018/2019 school year, as many as 10.67% of teachers have not beenqualified D4/S1. There is a positive relationship between the academic quality of teachers and student learning outcomes. "Students who have teachers with bachelor's degrees seem to progress faster than other students" (Chang et al, 2014). Therefore, we need to increase the number of teachers who are not yet qualified D4/S1. Professional teachers are distinguished not only by their academic qualifications, but also by their professional qualifications. We found that the percentage of teachers who met the qualification was not the same as the percentage of teachers who were certified. The ratio of certified teachers to the number of employed teachers is still less than 50%. Given that teaching qualifications are a measure of a teacher's professional suitability, it means that less than 50% of guru are qualified as professional teachers. The order of schools with the highest percentage of certified teachers is as follows: Junior High School (SMP) as much as 48.44%.Elementary School (SD) amounted to 45.77% and Senior High School (S MA) amounted to 41.09%. and Vocational High School (SMK) 28.49% (Jayani, 2019). To measure the quality of teachers, the Ministry of Education and Culture conducts proficiency tests.

Based on 2017 data, the average proficiency test scores according to the level of educationare: , 68, 27 for kindergarten teachers.Elementary school teachers 62.55, junior high school teachers 67.76. and 69.55 for high school teachers. The average competency test score achieved by teachers at all levels of education seems to be still below the established standard, which is 70 (Paramita, 2018). Thisshows that efforts are still needed to improve teacher performance. measure results. The policy also requires teachers to be able to develop learning and assessment content that requires the higher-order thinking skillsrequired by PISA and TIMSS assessments. In the context of independent learning, teachers must be able to educate students who have different personalities and academic abilities, explore and understand student personalities, and communicate with students and parents of different socioeconomic status. In other words, teachers need to fully master pedagogic, personal, social and professional abilities

Teacher Professional Development

Generally, as part of the preparation process, teachers undergo undergraduate training at higher education institutions known as the Indonesian Education Personnel Training Institute (LPTK). During

career preparation, you will be taught knowledge and skills that will enhance your educational, personal, social, and professional abilities.However, "no matter how good a teacher's pre-service training is, it is impossible to prepare teachers for every challenge throughout their careers" (OECD, 2009).

Education systems should provide teachers with professional development opportunities to improve teacher quality, learning, and student learning outcomes. Some researchers view professional development as a series of processes that occur whenteachers work in schools after completing their teacher training (Neimi, 2015). They focus on teacher learning, school effectiveness, and professional learning communities (Stoll, Bolam, McMahon, Wallace, and Thomas, 2006; Dehdary, 2017). Definedby Darling-Hammond, Hyler, and Gardner (2017) as "structured professional development" Professional learning that leads to changes in teacher knowledge and practice and improves student learning outcomes.

The essence of onal professional development is that teachers learn, learnhow to learn, and transform their knowledge into practices that benefit student development (Avalos, 2010). Effective professional development includes training, exercise, and feedback, as well as sufficient time and support for follow-up (cited by OECD, 2009). Wei et al. (2009) emphasize improving teacher knowledge and practice as well as improving student learning outcomes in effective teacher professional development. Effectivenessmeans professional development results in observable and measurable improvements in student learning (Thomson &; Goe, 2009). Several authors (Loucks-Horsley, Stiles, &; Hewson, 1996; DeMonte, 2013; Darling-Hammond et al. 2017; Walter & Briggs, 2012) suggest that effectively explain the characteristics of teacher training.

teaching (classroom-based); (2) involve extramural experts; (3) involve teachers in the selection of fields to be developed and activities to be carried out; (4) allow teachers tocollaborate with colleagues; (5) provide mentoring opportunities, (6) sustainable practices, (7) practice specific knowledge and skills, (8) be supported by effective school leadership, and (9) learn, build or strengthen communities, and (10) incorporate reflection, feedback, and follow up. By leveraging the characteristics listed above, school leaders can design meaningful learning experiences for all teachers.

A Brief Overview of Teacher Professional Development in Indonesia

Teacher professional development in Indonesia began in 1970 when the government held a three-week workshop involving teachers and principals from 27 provinces as national teacher trainers (Rahmañ, 2016). This program has produced 1. 200 coaches divided into 120 teams. In 1976, the program reached 90,000 primary school teachers in Indonesia. For secondary school teachers, in-service training is provided by the Centerfor Teacher Education Development (PPPG) established in 1979. PPPG's answer was also with the establishment of the Teacher Education Center (BPG).

In the early 1980s, the Teacher Professional Development Program (PKG) was established which combined in-service and in-service training. The Teacher Work Improvement Studio (SPKG) was developed to save district school fees. Thair and Treagust (2003) reported that more than 200 SPKG teams (one team per district) were formed in 1988. To ensure the sustainability of this project due to the lackof foreign funding, a Teacher Working Group (KKG) for primary school teachers and a Teacher Professional Council (MGMP) for secondary school teachers were formed in 1993. KKG and MGMP are still there, some are active, some are inactive.

This is influenced by the support of the central government, local governments, and teachers' interests (Chang et al., 2014) A 2010 World Bank report (Rahman, 2016) highlights that the Teacher Working Group has played an important role in preparing and implementingprofessional learning activities for Indonesian teachers over the past three decades. The report also noted that there were between 20,000 KKG and 15. 000 MGMP throughout Indonesia, making this teacher working group one of the 44 largest teacher networksin the world with more than 3 million teachers. During the reform period, the government developed a teacher professional development program known as Teacher Professional Education and Training (PLPG). The programme is designed to support teachers recruitedbefore December 2005 in obtaining a teaching qualification and is organised by selected teacher training institutions.

PLPG lasts for 90 hours or 10 days and is delivered in the format of lectures and workshops. The next development of PLPG was the launch of the In-Service Teacher Professional Education Program

(PPG). This is based on Accreditation Regulation Number 37 of 2017 of the Minister of Education and Culture of the Republic of Indonesia. The PPG program aims to train professional teachers who havepedagogic, personal, social and professional competencies in accordance with the provisions of laws and regulations (Nurwardani, 2018). Part-time PPG programs are organized by universities that have accredited educational staffing programs. As per the initial convention, teacher certification is only done once and does not require recertification or satisfactory performance to maintain certification status (World Bank, 2011).

This shows the need for continuous innovation in the development ofteacher professors. In addition to the above successes, there are several weaknesses/limitations in the implementation of teacher training in Indonesia. From several studies (e.g., Thaire & Treagust, 2003; Ekawati &; Kohar, 2016; Sobri, 2016; Rahman, 2016; Tambusai &; Umami, 2019), we can summarize some limitations of teacher professional development.

Teacher competencies are often not developed depending on the needs of the analysis.

1. Teacher training activities are not in accordance with the actual needs of teachers
2. Activities are carried outfrom top to bottom without consulting the teacher.
3. Lack of follow-up
4. The effectiveness of training is not measured systematically, either individually or in groups.
5. Schools do not provide adequate support to implement training resultsin schools.

School-Based Teacher Professional Development (An Alternative)

Continuous professional development of teachers is essential to improve teacher skills and improve teacher quality in a rapidly changing world (Owen, 2003). Teacher professional development should be based on data on teachers' actual problems and needs in improving the quality of learning and student outcomes. The data obtained will be used to design profe si development activitiesin the form of part-time and part-time learning. These data ensure that professional learning is not disconnected from practice and supports the areas of knowledge and skills to be developed (Darling-Hammond, Hyler, and Gardner, 2017).

The schools where teachers and principals work best know the problems and needs of teachers. In the context of independent learning, school-based teacher professional development (PPGBS) is one of the teacher professional development models thatprovides great opportunities for independence. PPGBS can be considered as an implementation of School Based Management (SBM). One aspect of SBM is the development and mentoring of staff, including teachers and administrative staff (Mulyasa, 2003). PPGBS is very important because it provides opportunities for teachers to focus their attention on problems related to the direction of school progress (Owen, 2003).

PPGBS, often referred to as workplace learning, is an integrated professional development model involving administrators, teachers, and school leaders designed by schools to support professional development and learning. PPGBS is considered an effective teacher professional development because the training and interaction take place in the workplace (Inasaridze, Lobzhanideze, Ratiani, 2015). PPGBS implies independence where school leaders exercise autonomy to provide all-round support to teachers in their professional development. Darling-Hammond and Richardson (2009), follow Hauge (2019), state that: "When schools support teachers with well-designed, engaging, and meaningful professional development, teachers can provide better learning and growth opportunities for their students. "PPGBS Belajar Merdeka in the context aims to delegate school responsibility and autonomy through:

1. Identify the professional needs of teachers and encourage continuous professional development at the school level.
2. increase teacher involvement andresponsibility in the process of planning, implementing, and evaluating professional development;
3. building a culture of cooperation between schools; (3) Improve the quality of teacher work through mutual aid learning.

The benefits of PPGBS are:

1. Enable professional developmentthat focuses on improving student quality and learning

outcomes.

2. Schools receive authentic evidence based on real practices in the school to determine the desired outcome.
3. provide opportunities for collaboration among teachers and address opportunities and challenges related to learning practices and tasks;
4. enable continuous professional development throughout the school year;
5. Making teacher professional development the direct responsibility ofthe principal. PPGBS collaborates with stakeholders to improve the quality and learning outcomes of students.

These parties are the central government, state government, district/city government, school principals, teachers, KKG/MGMP/MGBK, trainers, partner schools, and LPTK. The roles of each of the above stakeholders are as follows.

1. The Government of the Ministry of Education and Culture and its subordinate agencies and the Provincial/Government/City Education Office have animportant role in supporting the development of PPGBS.
2. They can play a role in providing legal support, guidelines, funding, technical support, trainer certification, and other resources to ensure good PPGBS practices and their sustainability.
3. Principal The principal must be actively involved in PPGBS.
4. School leaders are expected to have an idea of what needs to be improved and how much funding and other resources are needed.
5. School leaders use their relationships with state/district/citygovernments, state/provincial/city legislatures, businesses, parents, and community leaders to provide political, moral, and material support.
6. Teachers Teachers are the main stakeholders in PPGBS.
7. PPGBSexpects teachers to be able to identify problems and needs in improving the quality of learning and student outcomes.
8. You are also expected to co-develop training programs and share experiences with colleagues, coaches and each other.

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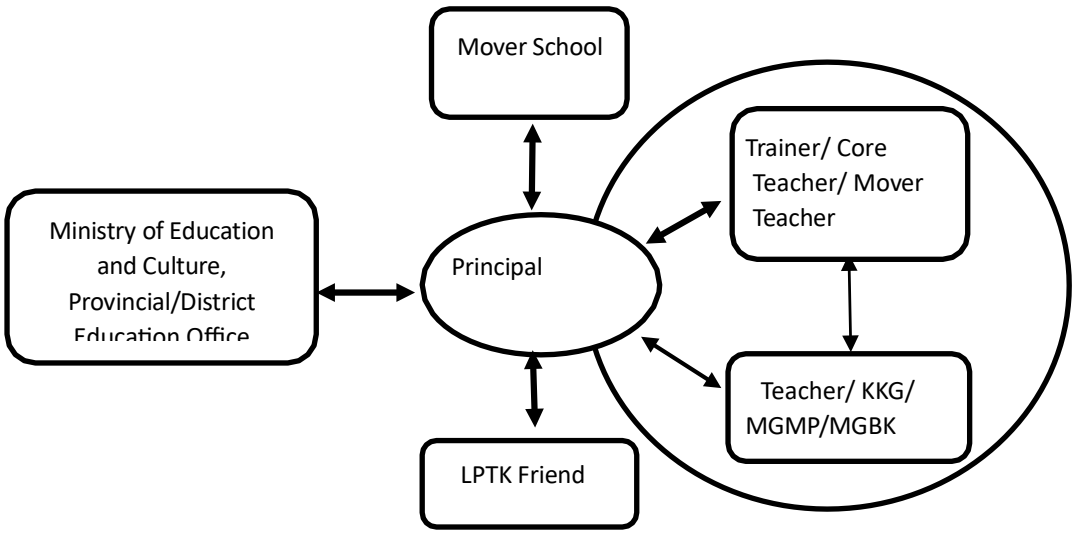

Figure 1. School-Based Teacher Professional Development Model (PPGBS)

PPGBS is a cycle of activities that includes: (1) needs assessment, (2) designing programs, activities and quality measures, (3) implementing programs in *in-service and on-the job learning* activities, (3) *monitoring* and evaluation, (3) collaborative reflection, and (4) make feedback and improvements. As the terminal of PPGBS is the improvement of knowledge, skills and attitudes

of teachers which ultimately leads to improving the quality of student learning processes and outcomes.

Conclusion

The independent learning policy, which is basically a policy presented to improve the quality of education in Indonesia, must be followed by transformation in various fields, one of which is teacher professional development. The challenges of education in the 21st century and the RI 4.0 era as well as the nation's character issues can be used as a foundation for teacher professional development in the future. The existing conditions of teachers concerning teacher qualifications, certification, and competence, as well as past teacher professional development experiences can be used as a reference in making more effective and efficient teacher professional development policies. Effective teacher professional developmentis based on the real problems and needs of teachers in improving the quality of student learning processes and outcomes. Therefore, greater autonomy to schools in designing and implementingteacher professional development models should be granted. On this basis, school-based teacher professional development is seen as an alternative to teacher professional development in supporting the policy of freedom of learning. Professional development of school-based teachers canreduce the budget and thus become more efficient.

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