

# Comparative Analysis of Teacher Training and Educational Programmes of New Zealand and Indonesia

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## ABSTRACT

Education sector has plethora importance as compare to other sectors of a country. No any country reaches on their destiny without education. For educational development, the education of teachers has more impact on it as compared to other factors. The teacher profession is a noble profession (Wangid, 2017). The development of every country depends on the education of their youth and the education of youth is in the hands of teachers. So, for the smooth growth and development education of teachers matters most. As in this article the comparative Study of two countries Indonesia and New Zealand in respect of their teacher education analysis. The data discloses that the literacy rate of Indonesia is 95.6%, which is low as compared with New Zealand having 99% according to 2020. However, public sector spending on education in the case of Indonesia is 3.6 of the GDP only while in the case of New Zealand the total spending which much more from Indonesia as 6.3 of GDP during 2020. Pupil-teacher ratios in both primary and secondary school are low in the case of New Zealand with 15 while in Indonesia it is 17 according to 2020. Student drop-out ratio in Indonesia according to 2020 is 1.8 while in New Zealand it's zeroes. Overall indicators of education show that both countries struggle with their best to achieve high goals in the recent future.

## Keywords

Education, Comparative analysis, Teacher Education Programmes, Training, New Zealand, Indonesia

## Introduction

From the main pillars of the economy, like industry and agriculture, the education sector also performs its main role in the development of that country. Education is the sector that not only boosts up economic growth but also helps in the social, moral and behavioral development of the young. Without education, no one achieves their desire and preplanned goals. As well as education, the education of teachers also important for producing manpower, skilled and responsible citizens. The secret behind the highest literacy rate of developed countries is only the capabilities of their teachers. Teacher develops the nations in a desiring way. Now globally all countries emphasizing teacher education in their policies and by expending more in this sector for betterment and improvement. Learning is a changing process since knowledge is not something stationary. For this reason, teaching should be enhanced and should transfer beyond outmoded and theory-based fundamentals; it should also be research-based and should have data-driven-evidence (Boudersa, 2016).

Teacher education or teacher training refers to the policies, procedures, and provision planned to

prepare teachers with the knowledge, attitudes, behaviors, and skills they require to perform their tasks excellently in the classroom, school, and broader community. All over the world, every year, in the name of improving teaching excellence, millions of currencies are invested in teacher professional development and intricate regulatory system have been designed to confirm that teachers involved in continuing professional learning activities (Jennifer Gore, 2017). New ways of understanding, knowledge and how we study; new and powerful skills; new patterns of mixing and new relocation flows across the world need more dynamic forms of teacher education (Livingston, 2016).

According to The Goods Dictionary of Education, Teacher Education (2016) means, all the formal and non-formal activities and experiences that help to qualify a person to assume responsibilities of a member of the educational profession or to discharge his responsibilities more effectively. Teacher education is used on the theory that- teachers are made, not born in contrary to the assumption, teachers are born, not made (Reena, 2016). Being a capable and well performing teacher is one of the most important properties in any educational institution (Boudersa, 2016).

Teacher education is more central today than it has been in half a century (Hassard, 2012). The efficiency of a teacher has on top priority while preparing agenda for education policy. Many nations have become agreed upon that teaching skill is one of the most important factor which greatly contribute to student achievement. For developing an effective teacher, teacher preparation and development are key building blocks (Hammond, 2017).

According to Reena (2016) teacher education is a continuous process and its pre-service and in-service components are complementary to each other. According to the International Encyclopedia of teaching and teacher education, teacher education can be considered in three phases: Pre-service, Induction, and In-service.

The three phases are considered as parts of the continuous process. Reena (2016) in order to make teachers who can face the challenges of the energetic society, teacher education has to keep up-to-date with recent developments and tendencies. The root of the entire process of teacher education lies in its curriculum, design, structure, organization and transaction modes, the event of its relevance. Bounders (2016) states that the teacher is considered the professional agent and the most directly responsible person in the process of learning. Teacher professional training and professional development is an essential component to support innovative and helpful teaching. A study from the Education Commission, found that there are two main reasons why continuous teacher growth and progress has a positive influence on pupil achievement: 1) Increasing teacher training that is associated to the trainees, proficiencies can produce more effective teachers. 2) Professional development prospects can be a motivational tool to continue improving as a teacher.

Here the comparison of two different countries New Zealand and Indonesia on teacher education is being made will identify the differences and similarities which further advises the education authorities to distinguish or revise the current system to reach the goal effectively.

### Literature Review

According to Boudersa (2016) Education has always been a powerful activity in any society and it is considered an essential instrument for transporting positive change in the social,

political, economic and cultural life of people. The whole process is molded by many important mediators, and the teacher is one of them. The teacher is claimed to play a vital role in education. Preparing teachers for the teaching profession is considered as being a higher priority in any country since this profession is considered as being thought-provoking and critical and may lead to nations' rising and evolution in the different domains. Matters related to teacher competency may differ among countries, in Indonesia, the problem of teacher professionalism is linked to pre-service education and the lack of continuous professional development.

In New Zealand, teachers face key issues are linked with work overload and the sensation of low payment. Teachers in both countries are mandatory to have the teacher's standard competence embodied with a certificate. Also before entering the classroom, all New Zealand teachers must have a certificate of teaching suitability, while in Indonesia, the teacher certification is implemented when teachers are already in the service (Kholis, 2019). Teachers comprise one of the largest groups in the service industries in New Zealand. In 1992, there were over 10,000 early childhood teachers, nearly 20,000 primary teachers, nearly 17,000 secondary teachers, 13,500 tertiary teachers, and a large number of paid and voluntary teachers in other education services.

In the early childhood sector, there is a variety of workers, both paid and voluntary. They cover a range of education and qualifications, from those who have trained and gained a diploma in teaching at colleges of education as well as a university degree to those who are untrained. Primary and intermediate teachers are trained as generalist teachers able to teach a range of classes of students. from junior primary to senior primary, in most if not all areas of the curriculum. There are some specialist teachers in intermediate schools. Secondary teachers are trained and employed largely as subject specialists (Hammond, 1995). It is described above that Indonesia's teacher competence consists of four aspects (1) pedagogical competence, (2) personality competence, (3) social competence, and (4) professional competence (MoE-ae, 2014). Beside, education is also facing a problem with the quality of teachers. According to BPS (2015), Indonesia has 3.073.159 teachers; 93% of them

are considered eligible and 6.89% are ineligible to teach. The ineligibility is caused by the absence of a teaching certificate, and compulsory education for teaching (4-years of undergraduate or 4-year diploma program). The performance of teachers in teaching is also low; that is 74.83% for elementary school teachers, 79.16% for Junior high school teachers and 81.16% for High school teachers (Slamat sugano, 2019). Fraser (1965) wrote about the history of comparative education and gave reference of Julian's plan for comparative education (1816-1817). He said that Julian was the first who classified the characteristics of different education systems. In his book known as the "Plan of Comparative Education" (1816-1817), Julian formulated an approach of "Comparative Analysis" to study the education system of any country (Dr. Nabi Bux Jumani, 2020).

### Objectives of the study

The objective of this article is to study, analyze and compare the education standards between New Zealand and Indonesia with respect to their teacher education.

### Discussion Indonesia

Indonesia is a cable of islands in South East Asia consisting of 17,000 islands six thousand populated and spanning the equator. Java most populous and the largest islands are Sumatra. Its neighbor to the east is Papua New Guinea and to the north is Malaysia. Indonesia was home to a variety of cultures and local beliefs when the islands came under the impact of Hindu ministers and dealers in the first and second centuries. Earthquakes are visited. Indonesia in 1922 was 15 made an intact part of the Dutch land. During Second World War, Japan held the islands of Indonesia and Tokyo was chiefly interested in Indonesia's oil, which was essential to the war struggle, and stood untried nationalists such as Mohammed Hatta and Sukarno (Polgar, & Jaafar, 2018). After Japan's surrender, Hatta and Sukarno announced Indonesian independence on August 17, 1945 (Adam, 2021).

### Teacher Education

If the government and universities are successful in preparing high quality teachers, it is highly bossy to boost the excellence of teacher education cover it quality as well. For student success good feature's teachers are the vibrant

element. Student's effort to learn if they have qualified and well-trained teachers and they will achieve improved academically, but if they can do not properly furnished teachers they cannot achieve well. Applicants of teacher education may have both subject understanding and a strong basis in education, alongside, teacher applicants should be given wide support. They should also be provided help with workshops and different projects (Loughran, 2012).

### Indonesia Education System

The educational system in Indonesia is structured in streams consisting of formal education, non-formal education, and informal education. These streams can complement and enrich each other through face to face classroom interactions, which may be supplemented or replaced with distance learning at higher levels of education. Formal education consists of three levels—basic, secondary, and higher education—and includes several types—general, vocational, professional, vocational-technical, religious, and special education. All streams, levels, and types of education are educational units organized by the national government, local governments, the community, or any combination thereof.

Early childhood education is provided before basic education in all streams (formal, non-formal, and informal education). In formal education, early childhood education is provided at general and Islamic kindergartens (Taman Kanak-Kanak or BustanulAthfal/RaudatulAthfal, respectively). In non-formal education, early childhood education takes place in play groups (Kelompok Bermain), at child care centers (Taman Penitipan Anak), or in other similar settings. In informal education, early childhood education takes the form of family education or education in the community (Dragana, 2019).

Basic education lays a foundation for secondary education and takes place in two stages: primary, Grades 1 to 6 (ages 7 to 12), and junior secondary, Grades 7 to 9 (ages 13 to 15). Primary education is provided at general and Islamic primary schools (Sekolah Dasar or Madrasah Ibtidaiyah, respectively), and other schools of the same level. Junior secondary education is provided at general and Islamic junior secondary schools (Sekolah Menengah Pertama or Madrasah Tsanawiyah, respectively), and other schools of the same level.

Secondary education (Grades 10 to 12, ages 16 to 18) is the continuation of basic education and comprises general secondary and vocational secondary education. It is provided at general and Islamic senior secondary schools (Sekolah Menengah Atas and Madrasah Aliyah, respectively), vocational senior secondary schools (Sekolah Menengah Kejuruan), Islamic vocational senior secondary schools (Madrasah Aliyah Kejuruan), and other schools of this level.

Higher education follows secondary education and consists of diploma, bachelor's, master's, specialized postgraduate, and doctoral degree programs. Higher education is provided at academies, polytechnics, schools of higher learning or specialization (sekolah tinggi), institutes, and universities. These institutions provide education, research, and community services and offer academic, professional, and vocational and technical programs (Musset, 2010).

### **Tertiary Education**

Education for people above school age, including colleges, universities and vocational courses. In Indonesia, there are four kinds of tertiary education institutions namely polytechnics, academies, institutes and universities. Some of these are government-controlled, some are religiously associated and some are privately sponsored. For the formation of a comprehensive system of teacher professional development it is important, to give more attention to teacher skill and attractive the school studying environment and also to strengthening the ability of educators, give more facilities and promote school enhancement at the regional level (Logli, 2016).

### **Regulatory agencies**

Since 1999, Indonesia has decentralized some of its educational authority to provinces and districts. By Government Regulation Number 25 (2000) there are some aspects of education that remain managed centrally by the Ministry of National Education, including: student competency standards, national curricula, and national assessments for learning outcomes; textbook standards; the acquisition and implementation of academic degrees; guidelines for educational budgeting; and instructional hours for basic and secondary education.

National and regional authorities share responsibility for educational policy in Indonesia.

Law Number 23 (2014) classifies governmental relations into three categories: absolute national authorities, concurrent national and regional authorities, and presidential authorities. National authorities are responsible for managing teacher education and providing teacher professional development schemes, for example, while regional authorities are responsible for transferring teachers within provinces or districts. Policies for national education standards are managed by national authorities, while basic education schools (Grades 1 to 12) and non-formal schools are managed by regional authorities (Team, 2015).

### **Primary School Teacher's Education**

Previously, primary school teachers (Grades 1 to 6) were required to hold a two-year diploma (certificate D-2) in order to teach officially in schools. A law passed in 2015 introduced new policies regarding teacher education, which specified that by 2015 all teachers would be required to complete a four year university degree and obtain teacher certification.<sup>4</sup> According to Law Number 14 (2005), general requirements for becoming a teacher in Indonesia include completing a four year university degree or four years of higher education, obtaining a teacher certificate, and demonstrating professional, pedagogical, personal, and social capabilities.

In order to obtain teacher certification, teachers are required to pass a competency test administered by the government. Before taking the test, teachers complete a one-year professional training program. Teacher candidates with subject teaching expertise (e.g., in mathematics, science, language, religious studies, or sports) who graduated from universities specializing in teacher education (Lembaga Pendidikan Tenaga Kungurian, LPTK) are required to complete 18 to 20 credit hours of training focused on professional competency development in order to obtain teacher certification. Teacher candidates field a university degree from a general university are required to complete 36 to 40 credit hours of training focused on pedagogical competency development in order to gain certification (Ping, 2013).

### **Teacher Education Specific to Mathematics and Science**

Secondary school teachers (Grade 7 and higher) are required to complete a university degree in their selected subject along with a pedagogical training program or a university degree in education. These programs naturally take four to five years to complete. Prospective mathematics and science teachers spend at least 60 percent of their course time studying mathematics or science, and the rest of their time is dedicated to pedagogy. The Ministry of Education and Culture provides scholarships and professional training programs in all subject areas through the Institute for Educational Quality Assurance. In addition to academic and pedagogical studies, prospective teachers are required to complete a teaching workshop at a selected school (Malinen et al, 2012).

### **Improve Quality of Teachers**

To improve the quality of teachers, the Ministry of National Education and Culture has run several programs such as the regular certification tests. Since 2015, professional teachers will be employed with these certifications. Besides, the education system has received a total of USD 34.9 billion investments in 2013, considered one of the largest investments compared with other sectors in Indonesia.

### **First Year of Teacher in Indonesia**

To understand the description of Indonesian beginning teachers in their induction year, CRT Indonesia carries out a study to learn how beginning teachers experience their first years of becoming a teacher. The study collects data from sixteen beginning primary school teachers who recently graduated from the Teacher Professional Education Program (Pendidikan Profesi Guru/PPG) in seven universities located in Java, Indonesia's most populated island. The teachers willingly participate in this two-year longitudinal study (2019–2021). They are required to write bi-monthly essays on selected topics of how beginning teachers undergo socialization in their first two years of teaching.

Six topics from the first year of the study are:

- 1) Enthusiasm to become a teacher,
- 2) Good teaching rendering to beginning teachers,
- 3) The job search process,
- 4) How beginning teachers manage their assignment,
- 5) How beginning teachers mingle with the school community,

- 6) How beginning teachers go through the first months of teaching.

### **New Zealand**

New Zealand, Maori Aotearoa, island country in the south Pacific Ocean, the southwestern most part of Polynesia. New Zealand is isolated land, one of the last sizable areas suitable for habitation to be populated and settle and lies more than 1,000 miles (1,600 km) southeast of Australia, its nearest neighbor. (New Zealand /History, 2019) Education System of New Zealand

There is a decentralized education system in New Zealand at three different levels, early childhood education, the school sector and higher education. Powers are transferred from central government to educational institutions for everyday operations and financial management. Parents who want to educate their child at home need to first get approval from their local ministry of education office. In the school sector, the legal responsibility for governance rests with the board of directors. These boards can also choose by elected parents, community volunteers, school administrators, staff representatives, and student representatives in high schools. The Board of Directors should inaugurate a charter for their school that includes goals for teaching and student improvement (Rob, 2015).

### **Regulatory agencies**

There are seven organizations in New Zealand that develop, implement and monitor education policies. Four of them play a major role in national policy setting and quality assurance in the New Zealand school system. Ministry of Education, Education Review, the New Zealand Qualifications Authority and the Aotearoa New Zealand Board of Education (Crawford, 2016).

1. The Ministry of Education is the main government agency responsible for the education system, headed by other agencies and education service providers. The ministry is responsible for developing the national curriculum and providing practical guidance for educational institutions. The main tasks of the ministry are to provide policy advice to the government and monitor implementation of acceptable policies. It collects and processes education statistics and information and monitors the efficiency of the education system. The Ministry of Education allocates funds and resources to institutions, including

professional development programs, and maintains a large real estate portfolio.

2. The Education Review Office (ERO) reviews education quality and compliance with regulations in every early childhood center and school. EROs examine all aspects of every center and school, including student learning and progression, community participation, leadership and governance, and legal compliance. Evaluators seek evidence of a high quality, improvement-oriented self-evaluation process. However, the main objective of the review is to monitor the effectiveness of the school program in enhancing student learning (Brough & Tracey, 2013).

3. The New Zealand Qualifications Authority (NZQA) supervises and coordinates all national qualifications (for example, high school, university, vocational and professional qualifications). Within the school system, the authority administers the National Certificate of Educational Certification (NCEA), the National Assessment and Reporting System for New Zealand High Schools (Strathdee, 2011).

4. The Education Board of New Zealand (EDUCNZ) (formerly known as the New Zealand Teachers Council) is a professional and regulatory body for early childhood education and school-enrolled teachers. Lawyers operate at arm's length from the government as an independent legal entity, and its responsibilities include setting and maintaining standards for teacher registration and ensuring the quality and qualifications of teacher education programs.

In New Zealand, education is compulsory for all students between the ages of 6 and 16, although most children start school after their fifth birthday (1 year) and age 13 to 18 years (Wylie, 2012).

In elementary schools, there is more emphasis on reading, writing and assessment in mathematics than in science, thanks to the formation of national statistics and statistics. National Administration Guidelines urge schools to make literacy and numbers a top priority, especially for students in grades 1-8 that are most at risk of identification: student Mori and Pacific, less social Students with an economic background and special education (Petrie, 2014).

In New Zealand, senior high school is a combination of compulsory subjects with optional subjects like art, media or language (Kompasiana, 2020).

### **Migration impact**

New Zealand has a comparatively high international student inflow compared with other countries across the OECD, where the number of students coming to study in New Zealand is much greater than the quantity of New Zealand residents choosing to study overseas (Aaron Norgrove, 2017).LK

### **Teacher Education**

All elementary teacher education programs contain obligatory training of 14 weeks for one year, or three weeks for graduate teacher education programs, or approximately 26 weeks for diploma programs. Training requires teachers to work under the supervision of experienced teachers in a range of schools. After graduation, junior teachers are provisionally registered and subject to additional supervision for at least two years. Schools need high-quality mentoring and mentoring programs to help temporarily enrolled teachers achieve full enrollment. High school math or science teachers are expected to complete some higher-level math or science essays. Mathematics and science are currently experiencing a shortage of teachers in secondary education (Kee, 2012).

### **Professional Development Requirements**

According to Petrie, Penney, & Fellows, (2014) the Aotearoa Board of Education in New Zealand maintains a registry of all qualified teachers. Teacher registration is compulsory for all teachers working in New Zealand schools. After registration, the teacher receives a certificate of practice that is renewed every three years. To renew their certification of practice, teachers must adhere to the teacher practice standards. One standard requires the achievement of continuous professional learning and a commitment to developing individual professional practice. The professional leader must certify that the teacher has achieved satisfactory professional development every three years of certification renewal. Schools are responsible for ensuring that teachers regularly participate in some form of professional development, most of which takes place in school settings. In 2015-2015, a large portion of the Mathematics Learning and Professional Development Fund was allocated to teachers between the ages of 1 and 23. As of 2011, professional development will focus largely

on a small number of national priorities, including mathematics and science.

S #	Areas	Indonesia	New Zealand
1	Education system	There is the decentralized system of education	There is also the decentralized education system
2	Population	269.6 million (2020)	5 million (2020)
	Official language	Indonesian	English/Maori
3	Literacy rate, Spending on education	95.66 % (2020) 3.6 of GDP (2015)	99.00% (2020) 6.3 of GDP (2017)
4	Children out of school	5.623 million (2018)	1,109.000 (2018)
5	School timing	7:00 am to 12:30pm and from 1:00pm to 5:30 pm	9:00am to 3:30pm
6	Student teacher ratio primary	13.98 :1 (2016)	7.47: 1 (2016)
7	Student teacher ratio secondary	16: 1 (2017)	14: 1 (2017)
9	Compulsory and free Education	For 12 years of education	From age 5 – 19 only in state schools
10	Types of Schools	Public (national) schools Private (national plus)	State schools state-integrated schools private schools

	schools	International schools
1 of Education	Preschool start from 3 years of age, Primary 6 years, Junior high school 3 years, Senior high school 2 years.	1.ECE — from birth to school going age. 2.Primary and secondary — from 5 - 19 years. 3.Further education— higher and vocational education.
1 Pre-2 School	2 years (play group, kindergarten)	ECE does not exist in New Zealand
1 Kindergarten	ECE divided into two parts. Formal: general kindergarten and Islamic kindergarten, 4 to 6 years Informal: provide services at playgroups , 3 to 6 years	For three and four-year-old (95%) get early <i>childhood education</i> for 20-22 hours a week.
1 Elementary	Primary: grade 1 to 6 age (7-12) Junior secondary school: start from grade 7 to 9 age (13-15)	Primary education starts from 1 years and goes to 8 years (5-12 y of age)
1 Secondary	Secondary: grade 10	Secondary education

	to 12 age (16-18).	goes from 9-13 years (13-17 years of age)		course of chosen subject plus 40% pedagogy).	Master of Teaching and Learning
<b>16</b>	Higher education includes: Diploma, Bachelor, Master, Specialize postgraduate, Doctoral degree program.	Ages 18+ Universities offer higher degree-level education. Programs are research-led and generally academic rather than vocational			
<b>17</b>	Teacher Education	Two traditional routes into teaching 1. Degree 2. Graduate diploma		<b>19</b> Assessment system for Teacher	Teacher Competency test, KIAT Guru Pilot Program TCA (teacher's competency assessment)
<b>18</b>	Teachers' training	Graduate from university, specialization in teacher education, 18-20 hours training focused on professional competency development, Pedagogical training program (60 %	Bachelor's degree also need to complete one of the following: Graduate Diploma in Teaching Graduate Diploma in Teaching and Learning Master of Teaching	<b>20</b> Examination system	National exam is a standard evaluation system of primary and secondary education. NCEA = National Certificate of Educational Achievement This certificate has three academic levels at secondary schools: 1. at year 11 (usually 15 years of age) 2. at year 12 (16 years' age) 3. at year 13 (17 years' age) Examinations are a mixture of school administered tests that are monitored nationally and national set exams at the end of the year.



2	Distanc	Radio	Massey
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	educati	Public	the
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		open	<i>Zealand</i> Univ
		university,	ersity for
		E-learning	distance
			learning,
			E-learning
2	Urbaniz	Urban:	Urban: 86.5
2	ation	55.3 %	% (2018)
	trend	(2018)	Rural: 13.5%
		Rural: 44.7	(2018)
		% (2018)	

Sources: World Bank Data

### Conclusion

The main objective of the current study is to increase consideration on the importance of education, in specific on the worth of teacher education in a comparative study of Indonesia and New Zealand. Education is significantly considered as route to economic and social richness. Indeed, education plays an important role in human capital development and a vital tool for overall improvement in social welfare.

Education helps jobs, approves sound foundation of social justice and equity, awareness, broad-mindedness and self-respect. Education is one of the most gainful and profitable investments of a country which could make in its people and its future and also is critical to dropping inequality and Poverty. The significance of education is certain for every individual and whole society.

Education has a very optimistic effect on human life. In any society education plays such a rudimentary role and without education we cannot visualize a life. The study finds that not only there are changes in culture in Indonesia; New Zealand but resources awards are also different as well total population. The data discloses that literacy rate of Indonesia is 95.66 %, which is the highest among other countries; while in case of New Zealand it is estimated 99%.

However, public sector spending on education in the case of Indonesia recorded 3.6 % of the GDP during 2015, and it is 6.3 % of GDP in the case of New Zealand during 2017. Pupil-teacher ratios in both primary and secondary school are low in case of Indonesia with 13.98 % and 7.47 % pupil per teacher, followed by New Zealand. The low education statistics

demonstrates that the education sector needs government consideration in order to recover it.

### Recommendations

The results of this study endorse that the government of Indonesia should frame an active policy for education raise, where most importantly spending on education must be increased 3.6 % at least 4 %. For this purpose, some unfruitful expenditure must be reduced. Expectation will further improve economic and social development in the country. Appropriate attention is required by the teacher training program in all countries under the study. The policymakers of Indonesia need to spend more on education sector and should also proper consideration to boost their education sector and gain more fruit of this area.

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