Research Article doi: 10.12973/eu-jer.9.2.655



European Journal of Educational Research

Volume 9, Issue 2, 655 - 673.

ISSN: 2165-8714 http://www.eu-jer.com/

Readiness and Competence of New Teachers for Career as Professional **Teachers in Primary Schools**

J. Julia*

Herman Subarjah Universitas Pendidikan Universitas Pendidikan Indonesia, INDONESIA Indonesia, INDONESIA

M. Maulana Universitas Pendidikan Indonesia, INDONESIA

Atep Sujana Universitas Pendidikan Indonesia, INDONESIA

I Isrokatun Universitas Pendidikan Indonesia. **INDONESIA**

Dadan Nugraha Universitas Pendidikan Indonesia. **INDONESIA**

Dewi Rachmatin Universitas Pendidikan Indonesia, **INDONESIA**

Received: December 6, 2019 • Revised: February 27, 2020 • Accepted: March 29, 2020

Abstract: This study aims at exploring the problem of the readiness and competence of new teachers to teach in primary schools. This study specifically focuses on identifying the readiness of new teachers to conduct teaching professionally, and analyzing their competence in conducting teaching. This study employs a mixed-method research design with data collected from two different approaches: a qualitative approach by conducting interviews and observation, and a quantitative approach by conducting a survey. The data were collected from lecturers, graduate teachers working as teachers, graduate teachers working not as teachers, and users of graduate teachers. The results of data collection and analysis were made into several themes. The results showed that the majority of graduates were ready to join the workforce as professional teachers with the risk that they had to accept the lack of welfare and legitimacy as unprofessional teachers because they had to attend further professional education programs. The education provided by the lecturers during their study in their institution in the aspects of knowledge and skills in the field of study and pedagogy became the foundation for new teachers in starting their careers as professional teachers in schools. A good educational process had produced teachers who have competencies with good categories in various aspects.

Keywords: New teacher career, new teacher readiness, new teacher competence, professional teacher, teacher professional education.

To cite this article: Julia, J., Subarjah, H., Maulana, M., Sujana, A., Isrokatun, I., Nugraha, D., & Rachmatin, D. (2020). Readiness and competence of new teachers for career as professional teachers in primary schools. European Journal of Educational Research, 9(2), 655-673. https://doi.org/10.12973/eu-jer.9.2.655

Introduction

Graduates of primary school teacher education in Indonesia are considered to have not had an established competence to become professional teachers in schools. This problem is taken seriously by the Indonesian government, so that the government implements an additional education program for prospective teachers or graduates of the teacher education program that had to be taken for one year. This program was regulated in the Ministry of Education regulation starting from 2009. This education program is conducted after graduating from undergraduate program or diploma IV called Training for Professional School Teachers (TPST) program. Its main objective is that participants obtain good, constructive, and reflective teaching experiences. Excellent teaching experiences in the early career of a teacher offers prospective teachers some chances to develop, evaluate, and reflect their teaching skills in a variety of school levels and content areas personally and professionally (Brown et al., 2015; Brown et al., 2019; Darling-Hammond et al., 2002; Darling-Hammond et al., 2005; Lee et al., 2012; Pendergast et al., 2011). The TPST program is also used as a requirement for teachers who want to be certified to become professional teachers. The implementation of TPST program has a significant impact on several aspects. For example, in terms of funding, the Indonesian government must spend a significant amount of money to fund this program every year. Meanwhile, from the participants' side, they experienced a loss of time due to a one year delay to apply for a job, because they have to attend further education program. This program has a function to make them obtain legitimacy as a professional teacher at

J. Julia, Universitas Pendidikan Indonesia, Jl. Mayor Abdurachman No. 211, Sumedang, Provinsi Jawa Barat, Indonesia, 45322. 🖂 juli@upi.edu



Corresponding author:

work. Although, they may work right away without joining TPST program, legally, their professionalism is not recognized.

This phenomenon has led to mixed reactions, including academics from teacher education universities who do not agree with TPST program being implemented. Their reason is based on the thought and argument that the graduates of teacher education have been well and properly educated to become teachers so that they have been ready to work professionally. This problem then emerges an attention that the inherent legitimacy now in new teachers in Indonesia over their professionalism or unprofessionalism needs to be further investigated. There are many studies about the competence of teachers have been reported by the researchers (e.g. Fahdini et al., 2014; Kert, 2019; Sarac, 2018; Suhandani & Julia, 2014; Tican & Deniz, 2019; Uyar et al., 2018). The results of previous study by Heikonen et al. (2017) about the teachers' sense as professional agent in their early career indicated that inadequate abilities in solving challenging students conditions have essential impact on their capacity pedagogically and socially to reflect adaptively and transform instruction actively. The study conducted by Nolan and Molla (2018) on learning of professional teacher through distress pedagogy proves that in learning of professional teacher, its process must be notified by distress pedagogy because of the relationship among the professional teachers' character, experiences, and acts of deliberation. Additionally, Rowan and Townend (2016) on teachers' beliefs in their early career about their preparations to teach report a result based on a large-scale, mixed-method Australian study project investigating 971 graduates who prepared themselves in meeting a variety of students' needs. This study used a unique data set to identify three key subjects when new teachers felt not ready yet: teaching students with various abilities, encouraging disability students, and communicating the problem appeared to parents. Recent study from Lambert and Gray (2019) discovers the relationship among work identities, neoliberal education groups, and mandated professional criterion of early career teachers. Its results imply that a managerial 'tick the box' approach practically delivers the standards ineffectively. It is considered how the representation of teacher identities is formed in neoliberal secondary schools through performativity concept. Finally, this study concludes that the performing arts can provide creative, collaborative, and impassioned approaches to supporting authentic teacher identities to maintain and preserve early career teachers.

Different from previous studies, this present study aimed at exploring and analyzing the readiness of graduates of primary school teacher education to join the workforce after receiving four years of teacher training, and identifying their competencies in conducting teaching in their early career in school. This study focuses on the following three research questions: (1) How are graduates formed as prospective professional teachers? (2) How is the readiness of graduates to join the workforce?; and (3) What are the competencies of new teachers in teaching at school? To answer all of those questions, some investigations through a mixed-method research design were conducted.

Literature Review

Teacher Readiness for a Career

Generally, in the educational context, the term 'readiness' frequently relates to the willingness and competence of K-12 school-level learners to come into school system or learn a new skill or information (Hatfield et al., 2016; Mohamed et al., 2017; Pianta et al., 2007; Williford et al., 2013). On the contrary, this term refers to the widely known process of the college certainty that their graduates have been ready for teaching profession (Ficarra & Quinn, 2014; Jackson et al., 2013; Joseph, 2011; O'Neill & Stephenson, 2013; O'Neill & Stephenson, 2012; Swabey et al., 2010). Nowadays, readiness indicates teachers' competence in providing particular aspects of their teaching work or even whole jobs (Sultana, 2009; Winterton et al., 2006). Another connotation of this term in teaching is the possession of vision beyond the conservative practices (Desimone, 2009; Shulman & Shulman, 2004; Sutherland et al., 2010). This study indicates that the indicator of 'readiness for the job' variable becomes the comprehension of early teachers mastering core teacher competence.

The study schedule influencing teacher education program had concentrated most recently on teachers' readiness to teach. Naturally, this topic had been sought to expand the measurement of program effectiveness beyond observable behavior measuring a change to teachers' thinking and feeling. The initial measurements are teachers' perceived self-efficacy (Bandura, 1986; Lin et al., 2019), individual teaching efficacy (Ashton & Webb, 1986; Kurien, 2011; Lim & Kim, 2014), and self-reported readiness (Chan, 2008; Darling-Hammond, 2012; Housego, 1992; Housego, 1990; Rots et al., 2010; Tekkaya et al., 2004; Zientek, 2007). Although some proofs in the early studies of a teacher preparation impact and feelings of readiness to teach developed with course progression, further studies had influenced inconsistent findings. As a result, the studies provided few ultimate conclusions about the teacher preparation impacts (Kee, 2012; Wilson & Tamir, 2008).

Teacher Competence

In addition to be a broad concept, the term 'competence' or 'competency' is quite new in education and still used as an equal standard (Mayer et al., 2005; Peklaj, 2015; Centre of Study for Policies and Practices in Education, 2000; Sural, 2019; Torrance & Forde, 2017). On the other hand, 'competence' has obtained a growing reputation in diverse academic disciplines, and now much supported in universities aiming at producing competent and prepared graduates

for the job (Lester, 2014; O'reilly et al., 2013). The concept of competence is prone because of its usefulness in uniting two apparently divergent worlds; education (in all levels and qualities) to the job market (with its variation types and prerequisites) (Brockmann et al., 2008; Mulder, 2007; Mulder et al., 2007; Winterton et al., 2006). A lot of conceptual differences between competence and competency are truly real in the literature, yet they are frequently used interchangeably (Haigh & Ell, 2014; Haigh et al., 2013; Winterton et al., 2006). This study remains to apply the concept of competence and coincides to the meaning given by Tigelaar et al. as an integrated set of individual characteristic, knowledge, skill, and attitude required for effective performance in a variety of teaching context (Pantic & Wubbels, 2010; Tigelaar et al., 2004). It is fundamental to make the teachers have specific knowledge of what and how to do in teaching activity, for individual and short-term gains by improving job performance, developing self-confidence, and for national and long-term gain by relieving the value of teacher-attrition (Rots et al., 2012; Tang et al., 2014; Thomson & Palermo, 2014).

In line with the case in competences, teacher competencies can be grouped into some classification depending on its nature (Saunders, 1956; Varga et al., 2007; Viskovic & Visnjic Jevtic, 2017). As for example, competencies are able to be separated into generic and specific competencies for teacher in general and certain subjects or school stages (Mayer et al., 2005; Centre of Study for Policies and Practices in Education, 2000). Another example is able to be discovered by differentiating key and competencies and meta-competences. The former allows some respects to generic competences, but has a tendency to be much broader and can be utilized in all areas. The fundamental concept of competence in all types and grades is able to be limited to only knowledge, skills, and values or attitudes (Alkharusi et al., 2011; Bakah et al., 2012; Centre of Study for Policies and Practices in Education, 2000; van der Linden et al., 2012). Nonetheless, especially in teacher education, the interpretation of those concepts engages a variety of connotations including, but not limiting to pedagogy, understanding, ability, vision, reflection, planning, willingness, motivation, resilience, experience, and moral (Darling-Hammond et al., 2005; Doney, 2013; Hayes, 1997, 1999; Mansfield et al., 2016; Mayer et al., 2005; Saka & Saka, 2006; Shulman & Shulman, 2004; Tait, 2008).

Teacher Income Satisfaction

The complex relationship between money and subjective well-being has been studied by scholars in different social and economic theories (Song et al., 2020). For example, Veenhove's absolute theory assumes a relationship between satisfaction of basic needs and subjective well-being, which is indicated by the threshold income level, where if income exceeds the threshold level, the effect of rising income becomes trivial (Clark & Oswald, 1996; Easterlin, 1995; Oswald, 1997; Veenhoven, 1991). Several previous research also suggested that after the fulfillment of basic needs are satisfied, subjective well-being is more likely to be affected by factors, such as supportive social relationships and enjoyment at work compared top increases in income (Ahuvia, 2008; Diener & Seligman, 2004; Dolan et al., 2008; Fischer & Boer, 2011; Mohanty, 2009; Pavot & Diener, 2008; Schubert, 2012). Moreover, Ferrer-i-Carbonell's analysis of individual subjective well-being underlines an additional relative utility effect (Ferrer-i-Carbonell, 2005; Kahneman & Krueger, 2006). She stated that individuals tend to be happier if their income is greater than the reference group since comparison income could indicate the importance of the relative position of individuals in society for their life satisfaction (Clark et al., 2008; Ferrer-i-Carbonell & Frijters, 2004).

There are many social and economic evidences on the basic threshold and relative effects of income that have contributed to the discussion of the importance of monetary incentives in the recruitment and retention of teachers (Song et al., 2020). Some research found that the high salary of teachers is positively related to the length of their working years (Borman & Dowling, 2008; Dolton & Klaauw, 1995; Hanushek et al., 2004; Loeb & Luczak, 2013; Macdonald, 1999; Murnane & Olsen, 1990; Rivkin et al., 2005). Teachers will choose to resign if they are not able to make a decent living, or generate competitive salaries, especially for those in hard-to-recruit subjective areas (Firestone, 2014; Ford et al., 2017; Grissom et al., 2016; Guarino et al., 2006; Hanushek, 2007, 2011; Hanushek & Rivkin, 2012; Ingersoll & May, 2012; Ingersoll & Perda, 2010; Johnson & Birkeland, 2003; Smith & Ingersoll, 2004; Turkoglu et al., 2017; Watt & Richardson, 2007). However, some studies also reported that increases in teacher salaries have failed to increase the size or quality of teaching staffs (De Ree et al., 2015; Glewwe & Muralidharan, 2016; Goldhaber, 2001; Guarino et al., 2006; Hanushek & Rivkin, 2006; Kusumawardhani, 2017; Loeb & Page, 2000; Muralidharan et al., 2019). During the last decade, it has been strongly proven that the limited effect of performancebased salaries on teacher motivation or their practice highlights the complex relationship between income and teachers' work, lives and effectiveness, and reinforces a need to examine teachers' income satisfaction in relation to factors, such as their values and efficacy beliefs that can influence the relationship in teachers' lives (Firestone, 2014; Fuller et al., 2016; Murnane & Olsen, 1990; Yuan et al., 2013).

Methodology

Research Design

This study employs a mixed-methods research design. In educational contexts, a mixed-methods research design has been used beneficially to explore the problems and cases with two approaches, namely qualitative and quantitative approaches (Hesse-Biber, 2015; Tavakoli & Baniasad-Azad, 2017). In this study, a qualitative approach is used to obtain information from new teachers, bearing in mind that the problem under study was teacher readiness and competence as central phenomena requiring exploration and understanding. Meanwhile, a qualitative approach is used to get complicated details about phenomena such as feelings, thought processes, and emotions that are difficult to extract or study through conventional methods (Corbin & Strauss, 2014; Creswell, 2015). This study seeks to understand the phenomena in new teachers. A qualitative approach is used when the research questions concern on describing an event or phenomenon, and managing the behavior of the impossible and contemporary events (Mourlam et al., 2019; Yin, 2018). This study strived to understand the phenomenon of the readiness and competence of new teachers in entering the workforce and carrying out teaching in the classroom. To assist in gaining more comprehensive knowledge, a quantitative approach was also implemented specifically to process survey data.

Participants

This study used purposive sampling method to select participants from one of the largest teacher education universities in West Java, Indonesia, which has produced teachers or prospective elementary school teachers. The graduates who were given the survey were 739 participants from five batches, namely those who graduated in 2015-2019, and 234 of them returned the survey. The following Table 1 presents a survey of primary school teacher education graduates from five batches.

		veyed Gradi duates		es who Filled out the Survey	Graduates who did not Filled out the Survey	
	Total	%	Total	%	Total	%
2015	187	100	82	43.85	105	56.15
2016	135	100	41	30.37	94	69.63
2017	199	100	51	25.63	148	74.37
2018	89	100	22	24.72	67	75.28
2019	126	100	38	30.15	88	69.85

Table 1. Survey of primary school teacher education graduates

Participants who were directly involved in the assessment of teacher competency problems in teaching were 15 participants from 15 elementary schools consisting of seven male participants (46.67%) and eight female participants (53.33%). Two participants (13.33%) graduated in 2014, seven participants (46.67%) graduated in 2015, one participant (6.67%) graduated in 2016, three participants (20%) graduated in 2017, and two participants (13.33%) graduated in 2019. Their employment statuses in their institution were six participants (40%) were Civil Servants, and the remaining nine participants (60%) were still non-Civil Servants. They were accepted to work as teachers in various range of time. One participant (6.67%) was accepted as a teacher within the span of four years before graduation, five participants (33.33%) were accepted as teachers in the same year as their graduation year, one participant (6.67%) was accepted as a teacher within the span of one year after graduation, four participants (26.67%) were accepted as teachers in the span of four years after graduation, and one participant (6.67%) was accepted as teachers in the span of time five years after graduation. They were spread in eight regions, namely Pringsewu, Bekasi, Sumedang, Majalengka, Bandung, Cirebon, Kuningan, and Punggur. They were willing to have their teaching performance in the classroom being observed for this research. Participants who did not work as teachers consisted of three male participants and two female participants.

Seven lecturers were also involved in this study as participants, consisting of three males and four females. Each of them teaches different subjects who are categorized into two classes of subjects, namely subject areas and pedagogical subjects. Besides that, two male participants were also involved in this study as graduates' users (principals) who were willing to participate to share their experiences about the ability of new teachers from the studied university who worked in their institutions. The graduates' users were involved to provide a broader picture of the readiness and competence of new teachers in teaching.

Ethical Consideration

All participants were informed and sought their approvals that the information provided by them would be used for research purposes and publication of research results. They were given a statement that those who were willing to fill in the survey, interviewed, and observed were considered to agree to participate in this study.

Data Collection

Data were collected by three instruments, namely survey, observation, and interview. The survey was given in the form of a questionnaire distributed via Google Docs. Using surveys can explore the graduates' types of jobs who were produced to be professional teachers, but whether their types of job were in accordance with the knowledge and skills they learn. This problem was investigated explore their readiness to enter the workforce.

Observations were made to identify the competencies of graduates in teaching at the school or institution where they work. Graduates performance were observed to explore information on the following 17 aspects: (1) availability of syllabi, (2) availability of lesson plans, (3) mastery of theories and concepts and their applications, (4) ability to explain, (5) analytical skills and problem solving, (6) skills using verbal/non-verbal language, (7) skills using appropriate teaching methods, (8) skills using technology/learning media, (9) skills creating dynamic interactive atmosphere, (10) communication skills, (11) skills in asking and answering questions, (12) skills in understanding differences in the potential of students, (13) skills in helping students with problems, (14) skills in managing learning processes, (15) skills in assessing student achievement, (16) skills in exemplary behavior, and (17) skills to instill values, ethics, and morals.

Interviews were conducted to lecturers, new teachers, non-teacher graduates, and graduates' users. Lecturers were interviewed to obtain information about their strategies in forming prospective professional teacher who are ready to enter the workforce. New teachers were interviewed to obtain information related to their perceptions of teaching activities and students. Of the 15 new teachers who were willing to be observed, only five teachers were willing to be interviewed consisting of three males and two females. Graduates who were not employed as teachers were asked the reasons they did not work as teachers and the alignment of their competencies with their new jobs. Meanwhile, the two principals as graduates' users were asked how their satisfaction toward the performance of new teachers in carrying out their work.

Data Analysis

Data analysis is the process of reading data repeatedly by choosing and coding (data reduction) and by showing data in within-case and cross-case matrices (Miles et al., 1994; Miles et al., 2018) and the data were coded as suggested by Saldana (2015). The final coding pattern was the code result based on conceptual framework and research questions, and inductive codes. Sub-codes were made for every aspect in this dimension. Those codes were also created inductively for preparation types at universities. Finally, the codes were given to participants' experiences for teaching. The same dimension fragments were classified and summarized in a cross-case matrix to find a particular pattern. When patterns were discovered, this study deliberately looks for inappropriate cases and patterns leading to more varied explanations, which is in accordance with the theories proposed by Cohen et al. (2013), Miles et al. (1994), Miles et al. (2018), and Robson (2002).

The responses of interview stage were examined and coded by the first author. Due to the interpretative and repeated nature of data analysis, it was impossible to recover inter-rater reliability (Akkerman et al., 2008; Carcary, 2009; Roller & Lavrakas, 2015).

To improve the trustworthiness of the analysis, this study involved multiple researchers. The extracts explanation of the codes and illustrative data were discussed by seven researchers whose backgrounds are in both qualitative study and the field of (teacher) education. Furthermore, the following procedures exist in the coding process: (1) All difficult fragments to code were discussed by researcher to the experienced one. These fragments and codes were conversed until achieving its consensus was reached and adjusting the coding to consider its outcome. (2) The interpretation from the first author was audited by a procedure in which the codes for two (randomly chosen) scored interviews (10%) were verified and conversed in a peer review by two other experienced researchers as suggested by Miles et al. (1994) and Miles et al. (2018), which generated 100% agreement on the assigned codes.

Besides the coding, the data matrices (for the within- and cross-case analyzes) and the different stages and decisions in the process were verified and discussed by the other co-authors (Akkerman et al. 2008; Roller & Lavrakas, 2015). Moreover, to prevent drawing conclusions too early, the data were examined and verified in the original data numerous times. Besides that, direct quotes from the interviews were used to show and support the findings.

Findings

This study was focused on exploring and analyzing the readiness of graduates of primary school teacher education or new teachers in dealing with the world of work, and identifying and analyzing their competencies in conducting the teaching process in the classroom. The results of the study formed four themes as follows: (1) forming prospective professional teacher, (2) teaching training program in schools, (3) between hope and reality to become a teacher, and (4) practices of becoming a true teacher.

Theme One: Forming Prospective Professional Teachers

The information related to the process of teacher training being applied to prospective elementary school teachers could be obtained from seven lecturers of a selected university who were willing to be interviewed. The data showed that prospective elementary school teachers must take 148-150 credits with a total of 62 courses to complete undergraduate teacher education. Under normal conditions, the amount of credit can be taken by students within four years (eight semesters). Except for students who have problems in academic and non-academic problems, these credits can be completed in more than four years. The courses taught are divided into three groups, namely pedagogic courses, subject areas consisting of Mathematics, Languages, Natural Sciences, Social Sciences, Arts (Music, Dance, and Fine Arts), and moral/ethics/values.

The initial description that had been obtained was that students were truly recognized by lecturers as prospective professional teachers in the future, so they must be given teaching materials according to their needs. One lecturer (L) emphasized, "I understand that students are prospective future teacher, so I teach what they need in the future with the challenges of technological development in the upcoming era". This indicates that students were prepared with futureoriented learning especially with regard to technological progress.

Those lecturers were asked, "Have you noticed the development of their competencies?" They answered as follows.

- L1: "Yes, I have. I even often compare the ability of students for each class".
- L2: "Yes".
- L3: "Yes".
- L4: 'Yes".
- L5: "That's right, in teaching, I always consider the ideal skills that must be possessed as a professional teacher. I also always motivate students to become teachers with professional skills in accordance with applicable regulations".
- L6: "Not too focused on teacher training, but still on the mastery of the field of study, because that is still a problem with students".
- L7: "Too much and big classes, four classes, each of which consists of 40 students, difficult to notice".

The answers from L1-L5 indicate that five lecturers had focused on noticing the development of student competencies without informing any obstacles in the process. Meanwhile, answers L6 and L7 indicate the existence of different conditions. L6 was more concerned with the development of students' abilities in the aspects of knowledge of their field of study than in the pedagogical aspects. Meanwhile, L7 encountered more conducive conditions because of the imbalance ratio of the number of lecturers and students. Therefore, so it was difficult to notice overall development.

In connection with these diverse teaching conditions, the investigation was continued by asking them this question. "How do you improve student mastery of the field of study?" All lecturers gave quite a variety of answers, namely as

- L1: "If it is done in the class, the time is not enough, so they are given assignments outside the class to be reviewed".
- L2: "The application of theory into practice is accompanied by the development of learning in the present field of
- L3: "Not only providing theory, but also facilitating students to practice directly".
- L4: "Provide the required nutrition both in content and method".
- L5: "Lectures with various methods that I use are directed to equip them in mastering the field of study they need. From face-to-face lectures, self-assignments, to structured groups are parts of my effort to fully equip the material in the course being taught".
- L6: "Through theoretical lectures and more practice. Some students are recommended to deepen their field of study in the student activity unit".
- L7: "Discussion of source books, research journals, and capita selection of actual problems".

The answers from L2, L3, and L6 indicate that the process of enriching the field of study to students was not sufficient given in the form of theory itself, but was reproduced by practice. In other words, theory was given, but the application of theory was of great concern to lecturers to emphasize more on students. The answers from L4 and L7 emphasize the provision of a variety of methods and actual studies of reading sources to students. Meanwhile, L1's answer indicates the strengthening of the field of study mixed with deepening of material outside the classroom by giving assignments.

This also indicates that pedagogical aspects have been incorporated into the learning process. To deepen information on this aspect, they were asked further question. "How do you teach students pedagogical skills?" The lecturers answered as follows.

- L1: "In lectures, there is always a presentation".
- L2: "Directly giving material, simulations, and practices to school".
- L3: "Increase the simulation in each course".
- L4: "Introduce various teaching strategies".

- L5: "The various methods that I use, for example class presentation as a part of the effort in getting them used to managing classes, managing materials, delivering material, discussing, and solving problems".
- L6: "In my opinion, pedagogical ability can be given after mastering the field of study and then they can be educated pedagogical knowledge through microteaching or teaching simulations, and field practice".
- L7: "Simulations of teaching, discussing, reading pedagogic books, and seeing examples".

The answers of five lecturers (L1, L2, L3, L5, and L7) indicate the existence of teaching practice activities in the learning process, such as presentations and teaching simulations. Meanwhile, L4's answers indicate that teaching pedagogical ability could be conducted through the introduction of a variety of teaching strategies. Answer L6 indicates that pedagogical ability must be taught after mastering the ability of the field of study, in the same way as other lecturers, namely through teaching simulations or field practice.

Theme Two: Teaching Training Program in Schools

After conducting observations related to the activities of students and lecturers in an effort to train students' ability to teach, the results revealed that there were two formal teaching training activities in the curriculum. First, teaching training activities in microteaching courses were conducted in the form of teaching simulations in classroom. Teaching simulations were observed, recorded and evaluated by lecturers, and other students. Second, the professional placement in primary schools totaling four credits was conducted for 40 days in the form of three stages of activity: orientation, teacher observation, and independent teaching. In the second activity, students were divided into groups of between 6-10 students to be distributed to schools, and each was guided by a lecturer and tutor from the school.

In relation to the practice of students to teach in this school, there is a question asked to the four lecturers, "What are the goals to be achieved by students in carrying out the professional placement in schools?" The following answers are:

- L1: "Students are able to implement four abilities well: (1) teaching, (2) communicating socially with colleagues, (3) guiding extracurricular activities, and (4) developing interpersonal skills".
- L2: "Students are able to internalize themselves in the profession as prospective teachers".
- L3: "Students have the ability to teach, manage classes, and understand school administration".
- L4: "Students obtain comprehensive learning in school".

The answers from L1-L4 illustrate that the lecturers understand the professional placement in various ways. However, four key words from lecturers that become the urgency of the professional placement include developing abilities, internalizing themselves, having teacher and administrator skills, and learning in school.

Furthermore, the next question was "What is the focus of the whole series of this professional placement?". The following answers are:

- L1: "To teach and guide students".
- L2: "To instill the students' habits and expertise as a part of the education sector, especially schooling".
- L3: "Students' skills to become professional teachers in teaching".
- L4: "Class administration, student cases, development of subject materials".

The answers from L1 and L3 illustrate that the practice of the professional placement is specifically focused on developing teaching skills. Meanwhile, the answers from L2 and L4 indicate that the practice of the professional placement was not specifically focused on practicing teaching skills, but also to familiarize students as a part of schooling and mastering administration in schools, including developing subject materials.

Theme Three: Between Hope and Reality to Become a Teacher

During college time, graduates were equipped with knowledge in aspects of the field of study, pedagogy, and the embedded of ethics and morals as prospective teachers. These aspects were given to make them ready to join the workforce as professional teachers. In fact, the most important thing is that graduates are expected to have a strong conviction that they are scholars who must work as teachers because they have been formed through teacher training as prospective teachers. In line with this, the search for exploring the employment information of graduates through surveys was conducted in this study. Their readiness to work as teachers can be seen from the suitability of the education undertaken with the selected job. The survey results can be seen in Figure 1 below.

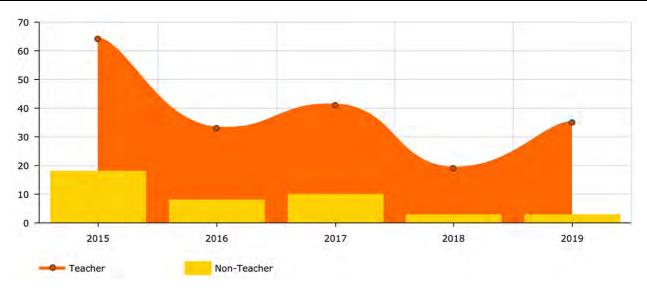


Figure 1. Graduates' Jobs as Teachers and Non-Teachers

Figure 1 depicts that of the 2015 graduate participants totaling 82 people, 64 of which (78.05%) became teachers and 18 of which (21.95%) did not become teachers. Of the 2016 graduate participants totaling 41 people, 33 of which (80.49%) became teachers and eight of which (19.51%) did not become teachers. Of the 2017 graduate participants totaling 51 people, 41 of which (80.39%) became teachers and 10 of which (19.61%) did not become teachers. Of the 2018 graduate participants totaling 22, 19 of which (86.36%) became teachers and three of which (13.64%) did not become teachers. Of the 2019 graduate participants totaling 38 people, 35 of which (92.11%) became teachers and three of which (7.89%) people did not become teachers. Thus, out of the total 234 graduates as participants, 192 people (82.05%) became teachers and 42 people (17.95%) did not become teachers.

This study conducted further investigation to obtain information about the reasons of all the participants who were prepared to become teachers, but in reality, not all of them became teachers. This investigation was specifically conducted to 42 graduates who did not become teachers through surveys and interviews. The survey results shown in Figure 2 can identify that of 42 graduates, six of which (14.29%) become private employees (PE), one of which (2.38%) become Smartfren gadget specialists (GS), one of which (2.38%) became consultant (CT), 12 of which (28.57%) became master students (MS), six of which (14.29%) were self-employed (SE), one of which (2.38%) became book publishers (BP), one of which (2.38%) became private company employee (PC), one of which (2.38%) became forex traders (FT), one of which (2.38%) became customer service (CS), one of which (2.38%) became school operator (SO), two of which (4.76%) became protocol (PC), one of which (2.38%) became administration officer (AO), one of which (2.38%) became secretary (ST), and seven of which (16.67%) have not worked (NW). Color gradation in Figure 2 represents the job classification of graduates, which are categorized into 13 types of jobs (PE, GS, CT, MS, SE, BP, PC, FT, NW, CS, SO, AO, and ST).

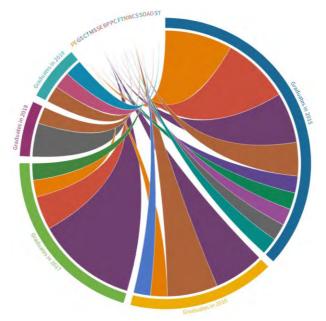


Figure 2. Graduates Who Work Not as Teachers

Through interviews, this study investigated the reasons of the occurrence of deviations from teacher training that had been taken by participants, but ended up working not as teachers. Exploring this problem was not easy because the participants were already scattered in far areas and focused on their activities in their work. Hence, this study only could reach five participants (P) to be interviewed. The following reasons are the results of interview for this question, "Why don't you work as a teacher based on the educational background you have taken?".

- P1: "Because the income is greater than being an honorary teacher in a state or private school especially in my area."
- P2: "Being a teacher is a noble profession. But, seeing the reality on the field, being a teacher is sometimes not appreciated in terms of welfare, especially for honorary teachers. For this reason, in fulfilling welfare to meet needs, the solution is to have a career in non-teachers."
- P3: "Because there hasn't been a chance to become a civil servant."
- P4: "Measure my abilities that are not suitable to be educators."
- P5: "I have a family, if I become a teacher but still an honorary one, it is not enough to support the family. Unless I pass the list of civil servants, I'm determined to become a teacher."

The answers from the participants (P1, P2, P3, and P5) indicate that their decision not to work as a teacher was due to income issues. Being an honorary teacher or teacher in a private school did not guarantee welfare for their living needs. Therefore, they were more interested in becoming teachers if they could be appointed as civil servant teachers who are paid by the government, get teacher allowances, and gain pension salaries. Meanwhile, one participant (P4) assumed that he had not had the eligibility to become an educator yet. The problem was indicated by his recognition feeling unable in mastering teacher competence.

Theme Four: Practices of Becoming a True Teacher

Graduates who are consistent with their educational subject joined the workforce by becoming new teachers in various elementary schools. Having been identified, they chose the location of the school and were accepted at the primary school in various ways. First, through the family route, so that the chosen school was the place where their families have been being taught. Besides that, some were asked by the school to be their teacher because of the lack of class teachers. What was more competitive was that graduates were accepted as civil servants because they took the test run by the government. In any way, the participants deciding to work as teachers were graduates who were deemed ready to become real teachers.

After having been given permission from the school, the observation was conducted to participants from 15 elementary schools in conducting the teaching process in the classroom. They were informed that observations were rated on a scale of 1-5 (1 = Not Very Good, 2 = Not Good, 3 = Enough, 4 = Good, and 5 = Very Good). The observation consisted of 17 aspects representing teachers' competence conducting teaching. Observation of each participant was conducted in two hours of study. The average value of the competence of 15 teachers from the observations is depicted in Figure 3 helow.

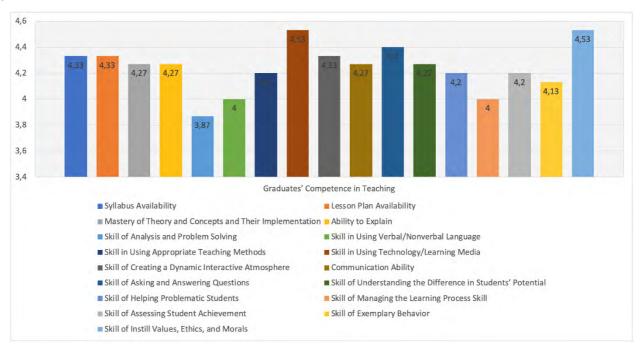


Figure 3. New Teachers' Competence in Teaching in the Classroom (Note: N=15)

Figure 3 depicts that based on the observation results of 15 participants, it can be identified that the average competence in teaching was as follows. The aspect of syllabus availability is classified as good with an average value of 4.33. The aspect of lesson plan availability is classified as good with an average value of 4.33. The aspect of mastery of theory and concepts and their implementations are classified as good with an average value of 4.27. The aspect of ability to explain is classified as good with an average value of 4.27. The aspect of analysis and problem-solving skills is sufficient with an average value of 3.87. The aspect of using verbal/nonverbal language skill is classified as good with an average value of 4. The aspect of using appropriate teaching methods skill is classified as good with an average value of 4.2. The aspect of using technology/learning media skill is classified as good with an average value of 4.53. The aspect of creating a dynamic interactive atmosphere skill is classified as good with an average value of 4.33. The aspect of communication skill is classified as good with an average value of 4.27. The aspect of asking and answering questions skill is classified as good with an average value of 4.4. The aspect of understanding the difference in students' potential skill is classified as good with an average value of 4.27. The aspect of helping students with problems skill is classified as good with an average value of 4.2. The aspect of managing the learning process skill is classified as good with an average value of 4. The aspect of assessing student achievement skill is classified as good with an average value of 4.2. The aspect of exemplary behavior skill is classified as good with an average value of 4.13. The aspect to instill values, ethics, and morals is classified as good with an average value of 4.53. Thus, the lowest value is in the aspect of analytical skills and problem solving, and the highest value is in the aspect of using technology/learning media skill and instilling values, ethics, and morals skill. Based on the average value of all aspects, the average value of teacher competence as a whole is 4.24 or is classified as good.

After having been given an observation in their teaching, the participants were interviewed to develop knowledge and understanding of their competencies. Five participants were willing to be interviewed. They were asked about the planning of teaching, "Why did you make a syllabus?" P1 answered "for planned learning." P2 answered "to support and guide when learning". P3 answered "the main tasks and functions as a teacher". P4 answered "planning learning". P5 answered "in order that learning is well-planned". Their answers convinced that the teachers are supposed to make a syllabus for learning planning. Then, they were given further question, "Do you always cling firmly to the lesson plan?" P3 and P4 answered "Yes", P2 answered "Always". However, P1 answers "No, depending on student conditions and time allocation". Likewise, P5 answered "Yes, but in certain circumstances, sometimes I have to improvise". This indicates that not all new teachers taught based on the syllabus and lesson plan, but some believed that they needed to see the situation and conditions in the classroom.

In addition, the questions were given related to the process of teaching, "How do you encourage students to be active in the learning process?". Those five participants answered as follows.

- P1: "Do not let the teacher ignore students who are active in their own world when learning takes place".
- P2: "Give enthusiasm, reward, and praise so that children are motivated".
- P3: "Make learning innovative and fun".
- P4: "Provide stimulus and reward".
- P5: "Always provide motivation, reward and punishment.".

Their answers indicated that some aspects such as reward, praise, stimulus, indifference, innovation, fun, and punishment, were the keywords of the teacher's treatment in the learning process. Their answers also indicate that building an active class atmosphere must be accompanied by constructive treatments.

We also explore the teacher's process of applying ethics and instilling ethics. They were asked, "How do you display exemplary behavior in front of students?" The five participants gave the following answers.

- P1: "Give examples of good behavior and speech".
- P2: "Always be kind to children and model good behavior".
- P3: "Good-looking, polite language and good behavior".
- P4: "Appear as it is".
- P5: "Always provide good examples in doing daily activities to students".

The participants' answers gave an illustration that the four participants agreed that the example was given through the teacher's behavior as the model, especially by modeling it through words and deeds, and dressing neatly as a part of the role model. Then, one participant believed that the example was sufficient given by appearing as it is in front of the students.

Besides that, they were asked graduates' user to obtain deeper information. Two participants who served as principals were willing to give their opinions, with the following question, "Is the performance of the new teachers meeting your

expectations?" Both participants answered "Yes". Then, further question was "What innovations did they develop in the learning process?" They gave the following answers.

P1: "Learning media and teaching styles in class".

P2: "Follow the development era by applying technology and character-based learning".

Those answers indicate that they had satisfaction with the performance of the new teachers through their innovation in developing learning media, teaching styles, and learning that uses a touch of technology and also brings up character education.

Discussions

In this study, each theme was analyzed and searched for the relationships among the four themes to obtain comprehensive information and understanding of the readiness and competence of new teachers. When connecting between the theme one, two, and three, there was a portrayal that students were given full-time knowledge and practice about the deepening of the field of study and pedagogy, both on the campus and through the courses of the professional placement in schools, even pedagogy was almost inserted in every subject even though special courses about it exist. However, the knowledge and practice of teacher training did not necessarily make all graduates continue working in accordance with their educational background. In other words, the majority of graduates worked in accordance with the knowledge they got. However, there was incongruity among a small number of graduates due to not working or having a career as a teacher. Through this phenomenon, the majority of graduates showed that they had readiness to have a career as a professional teacher, but a small proportion of graduates were not ready for a career to become teachers.

There was a trigger factor causing some graduates not ready for a career to become teachers. The results of the investigation proved that the readiness of a small number of graduates not to work as teachers was because they were not appointed as civil servant teachers. In other words, economic factor was the main problem for prospective teachers. Honorary teachers in both public and private schools could not provide welfare for their lives. The government had not yet been able to develop the salary of honorary teachers, such as by providing teacher remuneration (Derkachev, 2015). This salary problem did not only occur in Indonesia, but also in other countries. In line with this, Tang et al. (2018) and Xuehui (2018) proved that the gap in salary and benefits does not only affect the number of teacher supplies, but also causes the disappearance of qualified teachers. In other words, low teacher salaries have become a problem that is commonly complained of by teachers (Bruhwiler, 2015). Therefore, prospective teachers look for other jobs that are more promising for their income even though the work is not based on the knowledge learned in college. This disharmony becomes a big question for people whether their non-teacher job can be conducted professionally with their basic knowledge as prospective teachers.

The search results regarding the problem were revealed from the participants answering this question "Do you have difficulty working professionally because your basic knowledge is teacher education?" P1 answered "No, in my opinion, there is enough jobs for education graduates". P2 answered "No, because everything can be learned if you have a strong intention and determination". 'P3 answered "No, because I am able to adapt". P4 answered "for the field of work that I am living in now, thank God not, because as a trader, there are no specific rules that have a certain educational background". P5 answered "No, because for four years I studied Teacher Education. So, God willing, I have mastered it". Participants' answers showed the belief that their teacher training background was not a problem in their non-teacher work. However, their answers also indicate that they are adapting, learning continuously, and also having faith that their knowledge had supported their work.

When the theme one, two, and four were connected, the harmony between the efforts made by lecturers in providing knowledge and skills in the field of study and pedagogy, and the actual teaching practices of new teachers in the schools where they work appeared. The observation results of the teaching process to new teachers through 17 aspects of teacher performance showed good competence with an average value of 4.24 although basically, teachers, in their first years of teacher's profession, are very easily affected to learning intentionally and responsively in class (Heikonen et al., 2017). In fact, the results of the study conducted by Louws et al. (2018) showed that the early career teachers had problems in growing and increasing professionalism. However, the investigated new teachers in this study showed good performance in almost all aspects assessed. In addition to being equipped with new teachers in the fields of study and pedagogy, they also learned from their own environment. For this reason, some of them did not always fully teach based on the lesson plans they make, but occasionally they improvised based on needs, situations and conditions, and the time available. In other words, teachers have the ability to adapt their classroom practices to create personalized learning spaces (Deed & Lesko, 2015; Deed et al., 2014; Peeters, et al., 2016).

New teachers also have a desire to develop the learning process in the classroom by involving technology use. Technology-centered teaching experiences increase teacher self-efficacy (Bahcivan et al., 2019; Han et al., 2017; Kauppinen et al., 2018). This aspect also gave satisfaction to the graduates' users or principals. The results of the principals' assessment indicate that new teachers were considered innovative in applying technology to the learning process. This is a matter of pride for the school since technology can no longer be separated from learning in the current era, especially for learning at the elementary school level (Apriani & Julia, 2019; Baskerville, 2012; Julia, 2019a, 2019b; Julia et al., 2019c; Julia et al., 2019c; Julia et al., 2020; Lin et al., 2019; Maulana & Julia, 2019), In fact, it has become a necessity in almost every lesson. Due to the ability in technology and creativity in developing learning media and teaching styles, the principals also showed satisfaction to the new teachers.

Conclusions

In conclusion, the three questions being asked at the beginning could be answered based on the investigative process. "How are graduates formed as prospective professional teacher?" Search results show that prospective teachers were given concurrent knowledge and skills in the field of study and pedagogy. Although knowledge and pedagogic elements have their own lessons, in almost all subjects pedagogic elements are raised. The process of honing teaching skills is not only carried out on campus, but also carried out through the practice of professional placement in schools. "How is the readiness of graduates in entering the world of work?" The majority of graduates were ready to work as professional teachers with the consequence of their low income if they only became honorary teachers or teachers in private schools. Even though they had not participated in the TPST program, they had not been called as professional teachers legally, they were still willing to start teaching or having a career in school. "What are the competencies of new teachers in teaching at school?" The investigation results show that the competencies of new teachers were in the good category, even gave satisfaction to graduates users or principals with their performance in the classroom. The characters of new teachers who are innovative and not tech-savvy were in the spotlight for principals.

Limitations

This study is still limited by the small number of participants and only one university is involved as its sample.

Suggestions

Through this study, it is recommended that the implementation of TPST program as a teacher training for teaching should be integrated into the teacher's undergraduate program. It is because the majority of graduates need jobs after graduating from college rather than continuing college to gain professional teacher recognition to add to their experience in teaching and obtaining teacher certification.

Acknowledgment

Gratitude is appropriate to be extended to the Indonesian Institute of Education Research and Community Service, Universitas Pendidikan Indonesia, for funding this study, and the participants who were willing to participate in this study. We also want to thank Prof. Mohammad Fakry Gaffar who initiated this research.

References

- Ahuvia, A. (2008). If money doesn't make us happy, why do we act as if it does? *Journal of Economic Psychology*, 29(4), 491-507.
- Akkerman, S., Admiraal, W., Brekelmans, M., & Oost, H. (2008). Auditing quality of research in social sciences. *Quality & Quantity*, 42(2), 257-274.
- Alkharusi, H., Kazem, A. M., & Al-Musawai, A. (2011). Knowledge, skills, and attitudes of preservice and inservice teachers in educational measurement. *Asia-Pacific Journal of Teacher Education*, 39(2), 113-123. https://doi.org/10.1080/1359866X.2011.560649
- Apriani, L., & Julia, J. (2019). Digital application in teaching musical traditional instrument for children. *Journal of Physics: Conference Series*, 1318, 1-6.
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. Longman Publishing Group.
- Bahcivan, E., Gurer, M., Yavuzalp, N., & Akayoglu, S. (2019). Investigating the relations among pre-service teachers' teaching/learning beliefs and educational technology integration competencies: A structural equation modeling study. *Journal of Science Education and Technology*, 28(5), 579-588.
- Bakah, M. A. B., Voogt, J. M., & Pieters, J. M. (2012). Updating polytechnic teachers' knowledge and skills through teacher design teams in Ghana. *Professional Development in Education, 38*(1), 7-24. https://doi.org/10.1080/19415257.2011.576265.
- Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs.

- Baskerville, D. (2012). Integrating on-line technology into teaching activities to enhance student and teacher learning in New primary Pedagogy Zealand school. Technology, and Education, https://doi.org/10.1080/1475939X.2012.659887
- Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. Review of Educational Research, 78(3), 367-409.
- Brockmann, M., Clarke, L., Mehaut, P., & Winch, C. (2008). Competence-based vocational education and training (VET): the cases of England and France in a European perspective. Vocations and Learning, 1(3), 227-244.
- Brown, A. L., Lee, J., & Collins, D. (2015). Does student teaching matter? Investigating pre-service teachers' sense of efficacy and preparedness. Teaching Education, 26(1), 77-93.
- Brown, A. L., Myers, J., & Collins, D. (2019). How pre-service teachers' sense of teaching efficacy and preparedness to impact performance during student 45(1),1-21. teach teaching. Educational Studies, https://doi.org/10.1080/03055698.2019.1651696.
- Bruhwiler, I. (2015). Teachers' remarks about their salaries in 1800 in the Helvetic Republic. Paedagogica Historica, 51(3), 264-279. https://doi.org/10.1080/00309230.2014.934695.
- Carcary, M. (2009). The research audit trial enhancing trustworthiness in qualitative inquiry. Electronic Journal of Business Research Methods, 7(1), 11-24.
- Centre of Study for Policies and Practices in Education. (2000). Learning standards, teaching standards and standards for school principals: A comparative study. OECD. Retrieved from https://www.voced.edu.au/content/ngv:60276.
- Chan, D. W. (2008). General, collective, and domain-specific teacher self-efficacy among Chinese prospective and inservice teachers in Hong Kong. Teaching and teacher education, 24(4), 1057-1069.
- Clark, A. E., Frijters, P., & Shields, M. A. (2008). Relative income, happiness, and utility: An explanation for the Easterlin paradox and other puzzles. Journal of Economic literature, 46(1), 95-144.
- Clark, A. E., & Oswald, A. J. (1996). Satisfaction and comparison income. Journal of Public Economics, 61(3), 359-381.
- Cohen, L., Manion, L., & Morrison, K. (2013). Research methods in education. Routledge.
- Corbin, J., & Strauss, A. (2014). Basics of qualitative research: Techniques and procedures for developing grounded theory. SAGE Publications.
- Creswell, J. W. (2015). Educational research: Planning, conducting, and evaluating quantitative and qualitative research, enhanced pearson etext with loose-leaf version access card package. Pearson Education, Inc.
- Darling-Hammond, L. (2012). Powerful teacher education: Lessons from exemplary programs. John Wiley & Sons.
- Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? Journal of teacher education, 53(4), 286-302.
- Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. Education Policy Analysis Archives/Archivos Analiticos de Politicas Educativas, 13(42), 1-48.
- De Ree, J., Muralidharan, K., Pradhan, M., & Rogers, H. (2015). Double for nothing? Experimental evidence on the impact of an unconditional teacher salary increase on student performance in Indonesia (Working Paper No. 21806). National Bureau of Economic Research. https://www.nber.org/papers/w21806
- Deed, C., & Lesko, T. (2015). 'Unwalling' the classroom: Teacher reaction and adaptation. Learning Environments Research, 18(2), 217-231.
- Deed, C., Lesko, T. M., & Lovejoy, V. (2014). Teacher adaptation to personalized learning spaces. Teacher Development, 18(3), 369-383. https://doi.org/10.1080/13664530.2014.919345
- Derkachev, P. V. (2015, 2015/07/03). Cross-regional differences in meeting the challenge of teacher salary increase. Russian Education & Society, 57(7), 572-589. https://doi.org/10.1080/10609393.2015.1096146
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. Educational researcher, 38(3), 181-199.
- Diener, E., & Seligman, M. E. (2004). Beyond money: Toward an economy of well-being. Psychological science in the public interest, 5(1), 1-31.
- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. Journal of Economic Psychology, 29(1), 94-122.

- Dolton, P., & Klaauw, W. v. d. (1995). Leaving teaching in the UK: A duration analysis. The economic journal, 105(429), 431-444.
- Doney, P. A. (2013). Fostering resilience: A necessary skill for teacher retention. Journal of Science Teacher Education, 24(4), 645-664.
- Easterlin, R. A. (1995). Will raising the incomes of all increase the happiness of all? Journal of Economic Behavior & Organization, 27(1), 35-47.
- Fahdini, R., Mulyadi, E., Suhandani, D., & Julia, J. (2014). Identifikasi kompetensi guru sebagai cerminan profesionalisme tenaga pendidik di kabupaten sumedang [Teacher competency identification as a reflection of teacher professionalism in sumedang district]. Elementary School Forum/ Mimbar Sekolah Dasar, 1(1), 33-42.
- Ferrer-i-Carbonell, A. (2005). Income and well-being: an empirical analysis of the comparison income effect. Journal of Public Economics, 89(5-6), 997-1019.
- Ferrer-i-Carbonell, A., & Frijters, P. (2004). How important is methodology for the estimates of the determinants of happiness? The economic journal, 114(497), 641-659.
- Ficarra, L., & Quinn, K. (2014). Teachers' facility with evidence-based classroom management practices: An investigation of teachers' preparation programmes and in-service conditions. Journal of Teacher Education for Sustainability, 16(2), 71-87.
- Firestone, W. A. (2014). Teacher evaluation policy and conflicting theories of motivation. Educational Researcher, 43(2), 100-107.
- Fischer, R., & Boer, D. (2011). What is more important for national well-being: money or autonomy? A meta-analysis of well-being, burnout, and anxiety across 63 societies. Journal of Personality and Social Psychology, 101(1), 164.
- Ford, T. G., Van Sickle, M. E., Clark, L. V., Fazio-Brunson, M., & Schween, D. C. (2017). Teacher self-efficacy, professional commitment, and high-stakes teacher evaluation policy in Louisiana. Educational Policy, 31(2), 202-248.
- Fuller, B., Waite, A., & Torres Irribarra, D. (2016). Explaining teacher turnover: School cohesion and intrinsic motivation in Los Angeles. *American Journal of Education*, 122(4), 537-567.
- Glewwe, P., & Muralidharan, K. (2016). Improving education outcomes in developing countries: Evidence, knowledge gaps, and policy implications. In Hanushek, E. A., Machin, S., & Woessmann, L. (Eds), Handbook of the Economics of Education (Vol. 5, pp. 653-743). Elsevier.
- Goldhaber, D. (2001). Significant, but not decisive. *Education Matters*, 1(2), 61-65.
- Grissom, J. A., Viano, S. L., & Selin, J. L. (2016). Understanding employee turnover in the public sector: Insights from research on teacher mobility. Public Administration Review, 76(2), 241-251.
- Guarino, C. M., Santibanez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173-208.
- Haigh, M., & Ell, F. (2014). Consensus and dissensus in mentor teachers' judgments of readiness to teach. Teaching and teacher education, 40, 10-21.
- Haigh, M., Ell, F., & Mackisack, V. (2013). Judging teacher candidates' readiness to teach. Teaching and teacher education, *34*(1), 1-11.
- Han, I., Shin, W. S., & Ko, Y. (2017). The effect of student teaching experience and teacher beliefs on pre-service teachers' self-efficacy and intention to use technology in teaching. Teachers and Teaching, 23(7), 829-842. https://doi.org/10.1080/13540602.2017.1322057
- Hanushek, E. A. (2007). The single salary schedule and other issues of teacher pay. *Peabody Journal of Education*, 82(4), 574-586.
- Hanushek, E. A. (2011). The economic value of higher teacher quality. *Economics of Education review*, 30(3), 466-479.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2004). Why public schools lose teachers. Journal of human resources, 39(2), 326-354.
- Hanushek, E. A., & Rivkin, S. G. (2006). Teacher quality. In Hanushek, E., & Welch, F. (Eds), Handbook of the Economics of *Education* (Vol. 2, pp. 1051-1078). Elsevier.
- Hanushek, E. A., & Rivkin, S. G. (2012). The distribution of teacher quality and implications for policy. Annu. Rev. Econ., *4*(1), 131-157.

- Hatfield, B. E., Burchinal, M. R., Pianta, R. C., & Sideris, J. (2016). Thresholds in the association between quality of teacher-child interactions and preschool children's school readiness skills. Early Childhood Research Quarterly, *36*(3), 561-571.
- Hayes, D. (1997). Teaching competences for qualified primary teacher status in England. Teacher Development, 1(2), 165-174.
- Hayes, D. (1999). Opportunities and obstacles in the competency-based training and assessment of primary teachers in England. Harvard Educational Review, 69(1), 1-29.
- Heikonen, L., Pietarinen, J., Pyhalto, K., Toom, A., & Soini, T. (2017). Early career teachers' sense of professional agency in the classroom: associations with turnover intentions and perceived inadequacy in teacher-student interaction. Asia-Pacific Journal of Teacher Education, 45(3), 250-266. https://doi.org/10.1080/1359866X.2016.1169505
- Hesse-Biber, S. (2015). The problems and prospects in the teaching of mixed methods research. *International Journal of* Social Research Methodology, 18(5), 463-477. https://doi.org/10.1080/13645579.2015.1062622
- Housego, B. (1992). Monitoring student teachers' feelings of preparedness to teach and teacher efficacy in a new elementary teacher education program. *Journal of Education for Teaching*, 18(3), 259-272.
- Housego, B. E. (1990). Student teachers' feelings of preparedness to teach. Canadian Journal of Education/Revue canadienne de l'education, 15(1), 37-56.
- Ingersoll, R. M., & May, H. (2012). The magnitude, destinations, and determinants of mathematics and science teacher turnover. Educational Evaluation and Policy Analysis, 34(4), 435-464.
- Ingersoll, R. M., & Perda, D. (2010). Is the supply of mathematics and science teachers sufficient? American Educational Research Journal, 47(3), 563-594.
- Jackson, C., Simoncini, K., & Davidson, M. (2013). Classroom Profiling Training: Increasing Preservice Teachers' Confidence and Knowledge of Classroom Management Skills. Australian Journal of Teacher Education, 38(8), 30-46.
- Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. American Educational Research Journal, 40(3), 581-617.
- Joseph, D. (2011). Early career teaching: Learning to be a teacher and staying in the job. Australian Journal of Teacher Education, 36(9), 1-14.
- Julia, J. (2019a). Shifting primary school teachers' understanding of songs teaching methods: An action research study Indonesia. International Education 7(3), 158-167. https://doi.org/10.18488/journal.61.2019.73.158.167
- Julia, J. (2019b). Technology literacy and student practice: Lecturing critical evaluation skills. International Journal of Learning, Teaching and Educational Research, 18(9), 114-130. https://doi.org/10.26803/ijlter.18.9.6
- Julia, J., Iswara, P. D., & Supriyadi, T. (2019a). Redesigning and implementing traditional musical instrument in integrated technology classroom. International Journal of Emerging Technologies in Learning, 14(10), 75-87. https://doi.org/10.3991/ijet.v14i10.10197
- Julia, J., Kurnia, D., Isrokatun, I., Wulandari, H., & Aisyah, I. (2019b). The use of the Synthesia application to simplify Angklung learning. *Journal of Physics: Conference Series*, 1318(1), 1-8.
- Julia, J., Supriyadi, T., & Iswara, P. (2019c). Using Android-based applications to support elementary school teachers to teach songs. Journal of Physics: Conference Series, 1318(1), 1-7.
- Julia, J., Supriyadi, T., & Iswara, P. D. (2020). Training the Non-Specialist Music Teacher: Insights from an Indonesian Action Research Study. Universal Journal of Educational Research, 8(2), 547-558.
- Kahneman, D., & Krueger, A. B. (2006). Developments in the measurement of subjective well-being. *Journal of Economic* perspectives, 20(1), 3-24.
- Kauppinen, M., Kiili, C., & Coiro, J. (2018). Experiences in digital video composition as sources of self-efficacy toward technology use. *International Journal of Smart Education and Urban Society*, 9(1), 1-12.
- Kee, A. N. (2012). Feelings of preparedness among alternatively certified teachers: What is the role of program features? Journal of teacher education, 63(1), 23-38.
- Kert, S. B. (2019). A proposal of in-service teacher training approach for computer science teachers. European Journal of Educational Research, 8(2), 477-489.
- Kurien, S. A. (2011). The relation between teachers' personal teaching efficacy and students' academic efficacy for science and inquiry science. The University of Nebraska-Lincoln.

- Kusumawardhani, P. N. (2017). Does teacher certification program lead to better quality teachers? Evidence from Indonesia. Education Economics, 25(6), 590-618.
- Lambert, K., & Gray, C. (2019). Performing 'teacher': exploring early career teachers' becomings, work identities and the [mis-]use of the professional standards in competitive educational assemblages. Pedagogy, Culture & Society, 27(1), 1-23. https://doi.org/10.1080/14681366.2019.1663247.
- Lee, J., Tice, K., Collins, D., Melton, A. J., Brown, A., & Fox, J. (2012). Assessing student teaching experiences: Pre-service teachers' perceptions of their preparedness and efficacy. Educational Research Quarterly, 36(2), 3-19.
- Lester, S. (2014). Professional standards, competence and capability. Higher Education, Skills and Work-based Learning, 4(1), 31-43.
- Lim, Y.-J., & Kim, M.-N. (2014). Relation of Character Strengths to Personal Teaching Efficacy in Korean Special Education Teachers. *International Journal of Special Education*, 29(2), 53-58.
- Lin, X.-F., Tang, D., Lin, X., Liang, Z.-M., & Tsai, C.-C. (2019, 2019/12/12). An exploration of primary school students' perceived learning practices and associated self-efficacies regarding mobile-assisted seamless science learning. International Journal of Science Education, 41(18), 2675-2695. https://doi.org/10.1080/09500693.2019.1693081
- Loeb, S., & Luczak, L. D.-H. (2013). How teaching conditions predict: Teacher turnover in California schools. In Rendering School Resources More Effective (pp. 48-99). Routledge.
- Loeb, S., & Page, M. E. (2000). Examining the link between teacher wages and student outcomes: The importance of alternative labor market opportunities and non-pecuniary variation. Review of Economics and Statistics, 82(3), 393-408.
- Louws, M. L., Meirink, J. A., van Veen, K., & van Driel, J. H. (2018, 2018/01/02). Understanding teachers' professional learning goals from their current professional concerns. Teachers and Teaching, 24(1), 63-80. https://doi.org/10.1080/13540602.2017.1383237
- Macdonald, D. (1999). Teacher attrition: A review of literature. Teaching and teacher education, 15(8), 835-848.
- Mansfield, C. F., Beltman, S., Broadley, T., & Weatherby-Fell, N. (2016). Building resilience in teacher education: An evidenced informed framework. *Teaching and teacher education*, 54(1), 77-87.
- Maulana, A., & Julia, J. (2019). Using Pazia Angklung application in understanding song scores. Journal of Physics: Conference Series, 1318(1), 1-6.
- Mayer, D., Mitchell, J., Macdonald, D., & Bell, R. (2005). Professional standards for teachers: A case study of professional learning. Asia-Pacific Journal of Teacher Education, 33(2), 159-179.
- Miles, M. B., Huberman, A. M., Huberman, M. A., & Huberman, M. (1994). Qualitative data analysis: An expanded sourcebook. SAGE Publications.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2018). *Qualitative Data Analysis: A Methods Sourcebook*. SAGE Publications.
- Mohamed, Z., Valcke, M., & De Wever, B. (2017). Are they ready to teach? Student teachers' readiness for the job with reference to teacher competence frameworks. Journal of Education for Teaching, 43(2), 151-170.
- Mohanty, M. S. (2009). Effects of positive attitude on happiness and wage: Evidence from the US data. Journal of Economic Psychology, 30(6), 884-897.
- Mourlam, D. J., De Jong, D., Shudak, N. J., & Baron, M. (2019). A phenomenological case study of teacher candidate experiences during a yearlong teacher residency program. The Teacher Educator, 54(4), 397-419.
- Mulder, M. (2007). Competence the essence and use of the concept in ICVT. European journal of vocational training, 40(5), 5-22.
- Mulder, M., Weigel, T., & Collins, K. (2007). The concept of competence in the development of vocational education and training in selected EU member states: a critical analysis. Journal of Vocational Education & Training, 59(1), 67-88.
- Muralidharan, K., Singh, A., & Ganimian, A. J. (2019). Disrupting education? Experimental evidence on technology-aided instruction in India. American Economic Review, 109(4), 1426-1460.
- Murnane, R. J., & Olsen, R. J. (1990). The effects of salaries and opportunity costs on length of stay in teaching: Evidence from North Carolina. *Journal of human resources*, 25(1), 106-124.
- Nolan, A., & Molla, T. (2018). Teacher professional learning through pedagogy of discomfort. Reflective Practice, 19(6), 721-735. https://doi.org/10.1080/14623943.2018.1538961

- O'Neill, S., & Stephenson, J. (2013). One year on: First-year primary teachers' perceptions of preparedness to manage misbehaviour and their confidence in the strategies they use. Australasian Journal of Special Education, 37(2), 125-146.
- O'reilly, D., Cunningham, L., & Lester, S. (2013). Developing the capable practitioner: Professional capability through higher education. Routledge.
- O'Neill, S., & Stephenson, J. (2012). Does classroom management coursework influence pre-service teachers' perceived preparedness or confidence? *Teaching and teacher education, 28*(8), 1131-1143.
- Oswald, A. J. (1997). Happiness and economic performance. The economic journal, 107(445), 1815-1831.
- Pantic, N., & Wubbels, T. (2010). Teacher competencies as a basis for teacher education-Views of Serbian teachers and teacher educators. *Teaching and teacher education*, 26(3), 694-703.
- Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. The Journal of Positive Psychology, 3(2), 137-152.
- Peeters, J., De Backer, F., Kindekens, A., Triquet, K., & Lombaerts, K. (2016). Teacher differences in promoting students' self-regulated learning: Exploring the role of student characteristics. *Learning and Individual Differences*, 52, 88-96.
- Peklaj, C. (2015). Teacher competencies through the prism of educational research. Center for Educational Policy Studies Journal, 5(3), 183-204.
- Pendergast, D., Garvis, S., & Keogh, J. (2011). Pre-service student-teacher self-efficacy beliefs: An insight into the making of teachers. Australian Journal of Teacher Education, 36(12), 46-58.
- Pianta, R. C., Cox, M. J., & Snow, K. L. (2007). School readiness and the transition to kindergarten in the era of accountability. Paul H. Brookes Publishing.
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. Econometrica, 73(2), 417-458.
- Robson, C. (2002). Real world research: A resource for social scientists and practitioner-researchers (2nd ed.). Blackwell Publishing.
- Roller, M. R., & Lavrakas, P. J. (2015). Applied qualitative research design: A total quality framework approach. Guilford Publications.
- Rots, I., Aelterman, A., Devos, G., & Vlerick, P. (2010). Teacher education and the choice to enter the teaching profession: A prospective study. *Teaching and teacher education*, 26(8), 1619-1629.
- Rots, I., Kelchtermans, G., & Aelterman, A. (2012). Learning (not) to become a teacher: A qualitative analysis of the job entrance issue. Teaching and teacher education, 28(1), 1-10.
- Rowan, L., & Townend, G. (2016). Early career teachers' beliefs about their preparedness to teach: Implications for the professional development of teachers working with gifted and twice-exceptional students. Cogent Education, 3, 1-25. https://doi.org/10.1080/2331186X.2016.1242458
- Saka, A. Z., & Saka, A. (2006). An integrative model for preparing effective teachers. Eurasian Journal of Educational Research, (23), 168-176.
- Saldana, J. (2015). The coding manual for qualitative researchers. SAGE Publications.
- Sarac, H. (2018). Use of instructional technologies by teachers in the educational process: Metaphor analysis study. European Journal of Educational Research, 7(2), 189-202.
- Saunders, J. O. L. (1956, 1956/05/01). The relationship of preparatory program contributions to teacher competences. The Journal of Educational Research, 49(9), 697-702. https://doi.org/10.1080/00220671.1956.10882341
- Schubert, C. (2012). Pursuing happiness. *Kyklos, 65*(2), 245-261.
- Shulman, L. S., & Shulman, J. H. (2004). How and what teachers learn: A shifting perspective. Journal of Curriculum Studies, 36(2), 257-271.
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? American Educational Research Journal, 41(3), 681-714.
- Song, H., Gu, Q., & Zhang, Z. (2020). An exploratory study of teachers' subjective wellbeing: understanding the links between teachers' income satisfaction, altruism, self-efficacy and work satisfaction. Teachers and Teaching, 26(1), 1-29.

- Suhandani, D., & Julia (2014). Identifikasi kompetensi guru sebagai cerminan profesionalisme tenaga pendidik di kabupaten sumedang (kajian pada kompetensi pedagogik) [Teacher competency identification as a reflection of teacher professionalism in sumedang district (study on pedagogical competence)]. Elementary School Forum/ Mimbar Sekolah Dasar, 1(2), 128-141. https://doi.org/10.17509/mimbar-sd.v1i2.874.
- Sultana, R. G. (2009). Competence and competence frameworks in career guidance: Complex and contested concepts. International Journal for Educational and Vocational Guidance, 9(1), 15-30.
- Sural, S. (2019). An examination of pre-service teachers' competencies in lesson planning. Journal of Education and Training Studies, 7(3), 1-13.
- Sutherland, L., Howard, S., & Markauskaite, L. (2010). Professional identity creation: Examining the development of beginning preservice teachers' understanding of their work as teachers. Teaching and teacher education, 26(3), 455-465.
- Swabey, K., Castleton, G., & Penney, D. (2010). Meeting the standards? Exploring preparedness for teaching. Australian Journal of Teacher Education, 35(8), 29-46.
- Tait, M. (2008). Resilience as a contributor to novice teacher success, commitment, and retention. Teacher Education Quarterly, 35(4), 57-75.
- Tang, S. Y., Cheng, M. M., & Cheng, A. Y. (2014). Shifts in teaching motivation and sense of self-as-teacher in initial teacher education, Educational Review, 66(4), 465-481.
- Tang, Y., He, W., Liu, L., & Li, Q. (2018). Beyond the paycheck: Chinese rural teacher well-being and the impact of professional learning and local community engagement. Teachers and Teaching, 24(7), 825-839. https://doi.org/10.1080/13540602.2018.1470972
- Tavakoli, M., & Baniasad-Azad, S. (2017). Teachers' conceptions of effective teaching and their teaching practices: a mixed-method approach. **Teachers** and Teaching, 23(6), 674-688. https://doi.org/10.1080/13540602.2016.1218326
- Tekkaya, C., Cakiroglu, J., & Ozkan, O. (2004). Turkish pre-service science teachers' understanding of science and their confidence in teaching it. *Journal of Education for Teaching*, 30(1), 57-68.
- Thomson, M. M., & Palermo, C. (2014). Preservice teachers' understanding of their professional goals: Case studies from three different typologies. *Teaching and teacher education*, 44(1), 56-68.
- Tican, C., & Deniz, S. (2019). Pre-service teachers' opinions about the use of 21st century learner and 21st century teacher skills. *European Journal of Educational Research*, 8(1), 181-197.
- Tigelaar, D. E., Dolmans, D. H., Wolfhagen, I. H., & Van Der Vleuten, C. P. (2004). The development and validation of a framework for teaching competencies in higher education. Higher education, 48(2), 253-268.
- Torrance, D., & Forde, C. (2017). Redefining what it means to be a teacher through professional standards: Implications for continuing teacher education. European Journal of Teacher Education, 40(1), 110-126.
- Turkoglu, M. E., Cansoy, R., & Parlar, H. (2017). Examining relationship between teachers' self-efficacy and job satisfaction. *Universal Journal of Educational Research*, 5(5), 765-772.
- Uyar, R. O., Genc, M. M. Y., & Yasar, M. (2018). Prospective preschool teachers' academic achievements depending on their goal orientations, critical thinking dispositions and self-regulation skills. European Journal of Educational Research, 7(3), 601-613.
- van der Linden, W., Bakx, A., Ros, A., Beijaard, D., & Vermeulen, M. (2012). Student teachers' development of a positive attitude towards research and research knowledge and skills. European Journal of Teacher Education, 35(4), 401-419. https://doi.org/10.1080/02619768.2011.643401
- Varga, A., Koszo, M. F. z., Mayer, M., & Sleurs, W. (2007). Developing teacher competences for education for sustainable development through reflection: the Environment and School Initiatives approach. Journal of Education for Teaching, 33(2), 241-256. https://doi.org/10.1080/02607470701259564
- Veenhoven, R. (1991). Is happiness relative? Social indicators research, 24(1), 1-34.
- Viskovic, I., & Visnjic Jevtic, A. (2017). Development of professional teacher competences for cooperation with parents. Early Child Development and Care, 187(10), 1569-1582. https://doi.org/10.1080/03004430.2017.1299145
- Watt, H. M., & Richardson, P. W. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the FIT-Choice scale. The Journal of experimental education, 75(3), 167-202.

- Williford, A. P., Maier, M. F., Downer, J. T., Pianta, R. C., & Howes, C. (2013). Understanding how children's engagement and teachers' interactions combine to predict school readiness. Journal of Applied Developmental Psychology, 34(6), 299-309.
- Wilson, S. M., & Tamir, E. (2008). The evolving field of teacher education: How understanding challenge(r)s might improve the preparation of teachers. In M. Cochran-Smith, & S. Feiman-Nemser (Eds), Handbook of research on teacher education: Enduring questions in changing contexts (Vol. 3, pp. 908-936). Michigan State University.
- Winterton, J., Delamare-Le Deist, F., & Stringfellow, E. (2006). Typology of knowledge, skills and competences: clarification of the concept and prototype. Office for Official Publications of the European Communities Luxembourg.
- Xuehui, A. (2018, 2018/03/04). Teacher Salaries and the Shortage of High-Quality Teachers in China's Rural Primary and Secondary Schools. Chinese **Education** Society, 51(2), 103-116. & https://doi.org/10.1080/10611932.2018.1433411.
- Yin, R. (2018). Case study research: Design and methods (6th ed.). SAGE Publications.
- Yuan, K., Le, V.-N., McCaffrey, D. F., Marsh, J. A., Hamilton, L. S., Stecher, B. M., & Springer, M. G. (2013). Incentive pay programs do not affect teacher motivation or reported practices: Results from three randomized studies. Educational Evaluation and Policy Analysis, 35(1), 3-22.
- Zientek, L. R. (2007). Preparing high-quality teachers: Views from the classroom. American Educational Research Journal, 44(4), 959-1001.