https://doi.org/10.12973/ijem.8.2.331



International Journal of Educational Methodology

Volume 8, Issue 2, 331 - 346.

ISSN: 2469-9632 https://www.ijem.com/

A Skill Application Model to Improve Teacher Competence and Professionalism

Farihin Institut Agama Islam Negeri Syekh Nurjati Cirebon, INDONESIA

Suteja

Institut Agama Islam Negeri Syekh Nurjati Cirebon, INDONESIA

Muslihudin Institut Agama Islam Negeri Syekh Nurjati

Cirebon, INDONESIA

Aris

Institut Agama Islam Negeri Syekh Nurjati **Cirebon, INDONESIA**

Arif Abdul Hagg* Institut Agama Islam Negeri Syekh Nurjati Cirebon, INDONESIA

Widodo Winarso Institut Agama Islam Negeri Syekh Nurjati Cirebon, INDONESIA

Received: January 5, 2022 • Revised: March 9, 2022 • Accepted: May 11, 2022

Abstract: Teacher professionalism is needed for quality education. The current practice for increasing teacher professionalism is to use skill applications. However, the implementation of skill applications has, in fact, not succeeded in significantly increasing teacher professionalism. This study aims to explain the importance of an effective skill application model coupled with a comprehensive approach to raise the level of teacher competence. This study is qualitative with its data derived from observations, interviews, and questionnaires. The paper's research findings show that existing programs are not sufficiently enhancing teacher competencies and professionalism. Various teacher professional development activities are conducted; however, there has been no continuous postactivity follow-up. These professional development activities tend only to fulfill the administrative requirements for teacher promotion. What is needed is a comprehensive and continuous teacher professionalism assessment model, which is underpinned by a system of mentoring. This study has implications for evaluating the teacher's professional competencies. More comprehensive skill applications need to be formulated as part of an integrated, sustainable, and mentoring [terpadu, sustainable, pendampingan-TSP] approach to develop teacher professionalism significantly.

Keywords: Indonesia, model, skill application, teacher competence, teacher professionalism.

To cite this article: Farihin, Suteja, Muslihudin, Aris, Abdul Haqq, A. & Winarso, W. (2022). A skill application model to improve teacher competence and professionalism. International Journal of Educational Methodology, 8(2), 331-346. https://doi.org/10.12973/ijem.8.2.331

Introduction

Various efforts to increase teacher professionalism have fallen short in achieving the outcomes that are needed. Many teachers feel they lack the competence to develop their pedagogical talents, so they have difficulty adapting to the classroom (Orgoványi-Gajdos & Kovács, 2020), what's more, when learning must be accompanied by information technology and communication (Ziphorah, 2014). The expectations of students and parents are not met because of shortfalls in teaching skills (Thaariq et al., 2020). The current educational process still focuses on the cognitive aspect rather than focusing on teachers' professional competency.

Affective aspects, which form a substantial part of what is needed for living in society, has not been managed optimally (Sutyitno, 2012). Sustainable teacher professional development tends to be given just "Lip Service", a consequence of the absence of an evaluation that determines whether a teacher is professional or not (Danasasmita, 2015). The teacher professional development model is used in this study to provide solutions to educational issues.

Many studies on the teacher professional development model have been carried out in line with the demands for increased teacher competence. The existing studies tend to look at three aspects of teacher professionalism to date. The first is the training of teachers to improve their professionalism (Eliyanto & Wibowo, 2013; Sahari, 2018; Wardhana, 2016; Yuliana et al., 2019). The impact of teacher professionalism on student competence is the second factor to consider (Diana et al., 2020; Permatasari & Sobandi, 2019; Thaariq et al., 2020; Yusutria, 2017). The third point to

Corresponding author:

© 2022 The Author(s). **Open Access** - This article is under the CC BY license (<u>https://creativecommons.org/licenses/by/4.0/</u>).



Arif Abdul Haqq, Institut Agama Islam Negeri Syekh Nurjati Cirebon, Indonesia. 🖂 mr.haqq@gmail.com

consider is the impact of teacher professionalism on educational quality (Nurdiansyah, 2017; Sunhaji, 2016) and the quality of human resources (Ardipal, 2012; Yusutria, 2017).

In the literature, there are only a limited number of studies that identify the need to improve professionalism by evaluating teacher professionalism after participating in competency improvement training. Due to the existing problem of little research and data on this problem, this paper's initial hypothesis is that activities to increase professionalism that has been implemented have not achieved the competency outcomes that are needed. The implementation of skill applications can be optimized to increase teacher competence. This paper will complement previous research by focusing on the teacher professional development model. This paper also objectively describes the state of teacher professionalism. It explains the application of skills that have been implemented to increase teacher professionalism. This paper aims to provide solutions to the problem of achieving optimal outcomes from professional teacher activities through an integrated, sustainable, and mentoring skill application model. It affirms the need for standardization of professional development training opportunities tends only to be administrative completion. Unfortunately, it has made it difficult for teachers to recognize and address their professional development requirements (Kennedy, 2005).

Literature Review

Skill Application Models

Models for skill application can be built in a variety of ways and with a variety of backgrounds. The majority of continuing professional development (CPD) events can be thought of as a way to introduce or develop information, skills, attitudes, and knowledge assumptions. According to Eraut (2002), the most important aspect of CPD is the sort of professional knowledge received, the context in which it is acquired, and how it is applied to comprehend the nature of the knowledge. Teachers can use the skill application model to help them understand professional knowledge and professional discussions and assessments. However, this informal context is indeed most relevant to continuing professional development. The models presented in this part reflect the differing degrees of importance in each context as prospective sites of knowledge acquisition, as well as their consideration in examining professional competency development can take nine different forms or programs in general: 1) training; 2) certification; 3) deficiency; 4) reflective dissemination; 5) benchmarks-based; 6) mentoring; 7) working group; 8) action research; and 9) transformative

The training model in general, is still dominant in the development of teacher professionalism (Kelly & Williamson, 2002; Little, 1993). This model supports the idea of skills-based and technocratic teaching. This model also allows teachers to update skills to improve their competence. The speaker shares the materials and the teacher are in the passive role in this case. This training is usually carried out outside the institution The use of this model using external speakers off-site has sparked criticism because it can be arguably implemented in the institution itself. Unfortunately, the training program is often unrelated to the participants' (teachers') actual classroom situation.

The awarding model emphasizes completing a period of service to qualify for t an award. An example in Indonesia is the awarding of the *Lencana Karya Satya* (Satya's badge) after serving a certain period of service. It is conducted by validating the individual's effective service in a work area. In practice, this model also serves as a reference or limitation for the potential granting of other awards (Purdon, 2003). This award model is part of educational practice and applied to a teaching career to measure the teachers' integrity aside from their professional competency.

The deficit model is specially developed to address performance management inadequacies in teachers. Rhodes and Beneicke (2002) suggest that performance management is a means to improve performance standards. Government involvement in improving efficiency, effectiveness, and accountability is sometimes referred to as performance management. Performance supervisors manage and evaluate teachers' performance and are also responsible for enhancing a teacher's individual performance in weak areas.

The reflection dissemination model provides an opportunity for a teacher to participate in workshops. Following this, the teacher disseminates the workshop results to fellow teachers. This model tends to be chosen as an alternative when financial resources are limited but is not very popular in Indonesia. says that This cascade model tends to be used by a group of teachers in order to share their learning model (Day, 1999; Davies, 2000). They share what they've learned, with participation, collaboration, and ownership values guiding the process.

The standards-based model highlights the idea that teaching is a complicated political policy. It aims to create a learning and teaching system by teachers that can empirically prove the relationship between the effectiveness of teacher performance and student learning processes in certain situations (Beyer, 2002). Regrettably, this architecture restricts the possibilities for creating alternate skill application models. It also largely relies on a behaviorist learning viewpoint on the causal relationship between teacher competence and the rewards that emerge from it.

A variety of skill application methods based on philosophical principles are included in the coaching/mentoring model. The importance of one-on-one contact between two teachers is a crucial feature of this model. Both coaching and

mentoring have these characteristics. Coaching focuses primarily on skill transfer, whereas mentoring combines "professional counseling and companionship" aspects (Rhodes & Beneicke, 2002). Mentoring also entails a partnership between inexperienced and experienced teachers (Gitlin et al., 2020).

Technically, the coaching/mentoring concept is linked to the community of practice model. This style, on the other hand, is nearly the polar opposite of the prior coaching/mentoring model. The primary distinction is that a community of practice is made up of more than two persons and does not involve any level of confidentiality.

The hierarchical assessment-based model is another type of CPD coaching/assistance model mentioned before. This concept has little in common with the community practice model. Wenger (1997, 1998) claims that we are all part of a broad community of learning practices that are characterized by three key processes.

- a. Generate productive reciprocal relationships;
- b. Understand and adapt the work unit of the teacher community; and
- c. Develop the repertoire, styles, and discourses of the teacher community.

The action research model is characterized as a study of social circumstances in which individuals act as researchers in order to improve the quality of the situation. The participant's grasp of the circumstance and execution of the exercise might be deemed the quality of action. The action research model's proponents (Burbank & Kauchak, 2003) suggest that involving the community of practice in its actions will have a bigger impact. This is not, however, a need for an action research model.

The 'transformative model' involves several processes and conditions with aspects taken from various other models. The mix of practices and situations that promote a revolutionary agenda is its defining trait. Hoban and Hoban's (2002) perspective on this model is to support educational change efforts. They compare focused knowledge and contextual emptiness models. Contextual emptiness models from the practice model community's context-specific training approach do not always accommodate new kinds of formal knowledge.

Teacher's Core Competence as a Commitment

Future educational development philosophy is education organized by example, willingness, and creativity of students through a teacher's teaching commitment (Nafis et al., 2019). Teaching commitment can be characterized by a strong belief, willingness, and desire to contribute to educational institutions (Oolbekkink-Marchand et al., 2017). Ware and Kitsantas (2011) describe teacher commitment as a high intention and motivation to teach, which can be achieved if they get support, can influence policy, and control the class. Two essential elements determine a teacher's commitment to teaching: 1) internal influences (self-efficacy and value); and 2) external influences (e.g., salary and workload) (Chesnut & Burley, 2015; Klassen & Chiu, 2011). In this case, teaching commitment has direct implications for either positive performance (self-rewarding) or negative performance (dismissal and expulsion) (Chesnut & Burley, 2015). Therefore, teacher commitment and performance are essential because they are directly correlate with the formation of the nature and quality of students (Robert et al., 2012).

Teachers need professional competence development (Shaffer & Thomas-Brown, 2015). Prasertcharoensuk et al. (2015) states the competence of teachers to manage the learning environment and motivate pupils to develop solid reasoning skills is the most important aspect that determines the quality of education management. Pantić et al. (2011) states that teacher competencies can be classified into four categories: (1) personality and professional development; (2) content knowledge, pedagogy, and curriculum; (3) comprehending and contributing to the development of the educational system; and (4) value in student care. Competency grouping is carried out to encourage a linking of teacher's attitudes to quality standards, especially in essential pedagogical competencies (Liakopoulou, 2011; Ybyraimzhanov et al., 2020). Maklasa (as cited in Fadriati et al., 2020) says that teacher competency standards are established based on four crucial competencies: pedagogical, personality, social, and professional. The four components are core competencies of teacher professionalism (Farihin, 2021).



Figure 1. Teacher Professionalism Substantial Competence

Teacher Professional Development

External and internal interventions that emphasize characteristics and diversity can be considered as part of an educational program's success in developing the quality and professionalism of teachers in a school (Abdullah, 2018; Christiansen et al., 2021; Rahayu & Firmansyah, 2018). Fitriyah (2019) views that significant social, economic, political, and cultural transformations is driven by scientific developments, teacher quality, and professional development to address and overcome the problems. The development of teachers' quality and professionalism can not only respond to the complexity of today's educational problems but also the demands of education in a period of unprecedented technological and industrial change, especially in utilizing application models to support the learning and teaching process in various situations (Kraft & Christian, 2022; Santoso, 2018; Siregar et al., 2020; Sudrajat, 2020). In this regard, teacher performance evaluation must be carried out extensively and consistently to ensure teachers have the competencies to teach in this period of rapid change. Professionalism expresses a teacher's views, attitudes, and beliefs from a variety of different viewpoints. It is not fixed on a set of expectations or an externally imposed system.

One of the challenges in this conceptualization is how professionalism is derived from an individual or consensual basis. On the other hand, Evans (2011) argues for 'unprofessional' redundancy. When individual ideas or acts do not reflect the agreement, however, these manifestations tend to have explanatory value. Day and Sachs (2005) distinguish between two types of professionalism discourses: managerial and democratic professionalism. Democracy refers to activists, collaboration, and cooperative action amongst teachers and education stakeholders, whereas managerial is concerned with reform attempts, compliance, and economic efficiency. Furthermore, external regulation, systemic aims, and politics are prioritized in the management discourse of professionalism. It is an attempt by the government to intervene in teacher professionalism by setting professional standards.

Teachers must be professional to develop the teaching and learning process in light of the rapid advancement of technology and science. In practice, educators must have exceptional skills in preparing lesson plans that are oriented to the needs and abilities of students (Babinski et al., 2018; Cappa, 2020; Krzychała, 2020). Syahroni et al. (2020) say that the skills of teachers in adapting information technology and the internet in a curriculum are essential points in achieving educational goals in the era of globalization. Therefore, the integration between education and information technology has begun to become a focus in various programs to improve the quality and professionalism of teachers. These programs include improving teacher skills in operating e-learning applications, developing e-learning modules, and even utilizing social media platforms in the learning process (Kuncahyono & Kumalasani, 2019; Myori et al., 2019; Suhandiah et al., 2019). Kusen et al. (2019) said that improving the quality of teachers in intellectual and creative aspects is a significant point in the more applicable teaching and learning process in the era of globalization.

Methodology

This study as a whole uses a qualitative method. At the initial stage, a study was conducted to identify problems in the current state of Islamic Education (*Pendidikan Agama Islam*–PAI) teacher professionalism using research methods in observation, semi-structured interviews, and questionnaires. Furthermore, it is carried out with a systematic literature

review stage regarding what kind of skill application model is suitable to be developed, which is expected to accommodate teacher professional development needs. The first two stages of the research, observation and semistructured interviews, were conducted on seventeen subjects of PAI teachers with a working period of at least ten years who had just attended Teacher Professional Education. The reason for this selection is that teachers from PAI had recently been given the opportunity to undertake Teacher Professional Education even though they have been teaching for at least ten years. The study undertaken reflects the call for study based on observations during Teacher Professional Education activities (Chalkley & Nicholas, 1997) and adopts the framework provided by Becker's (1958) work. Questionnaires were distributed to respondents involving 202 teachers participating in Professional In-service Teacher Education in 2021.



Figure 1. Scaling of Teacher Professionalism Substantial Competency

Participants filled out questionnaires about teacher competencies, including core pedagogic, personality, social, and professional competencies, on a scale of 1 – 5 with the following intervals.

More than ten years of teaching experience are represented among those who responded to the survey. However, they have only been asked to attend In-Service Teacher Professional Education for about three months to receive a professional teaching certificate.

The questionnaire has 23 statements that are categorized based on four crucial competencies: pedagogical (10), personality (4), social (4), and professional (5). The respondents gave their answers through Google docs.

KI	No	Basic Competencies	
1	1	Mastering the physical, psychological, socio-cultural, and intellectual aspects of students	
1	2	Mastering educational learning principles and learning theories	
1	3	Design a curriculum that is relevant to the development area being taught	
1	4	Organizing activities for educational development	
1	5	Learning through the use of information and communication technology	
1	6	Assisting students in realizing their full potential	
1	7	Communicate with students in a clear, sympathetic, and courteous manner	
1	8	Assessments and evaluations of learning processes and outcomes are carried out	
1	9	Make the most of the assessment and evaluation results for the sake of learning	
1	10		
2	1	Act in a consistent way with Indonesian religious, legal, social, and cultural traditions.	
2	2	Demonstrate a strong work ethic, a high level of responsibility, pride in your work as a teacher, and self-	
		confidence	
2	3	Present yourself as a steady, stable, mature, intelligent, and authoritative individual	
2	4	Presenting oneself as a trustworthy individual with a noble character who can serve as an example to	
		students and the community	
3	1	Be inclusive, act objectively, and make no distinctions based on gender, religion, race, physical	
		condition, family background, or social level	
3	2	Effectively, empathically, and politely communicate with colleagues, education professionals, parents,	
		and the community	
3	3	Adapt to the location of duty across the Republic of Indonesia's socio-culturally diverse area.	
3	4	Oral, written, or other modes of communication with one's own professional community and other	
		professions	
4	1	Mastering the material, structure, concept, and scientific mentality that underpins the topics being	
		taught	
4	2	Mastering the development field that is taught	
4	3	Design learning resources that are artistically guided	
4	4	Reflective actions will help you develop professionalism in a long-term way	
4	5	5 Make use of information and communication technologies to communicate and grow.	

The initial data collection was carried out using five days of observation by a researcher, with the approval of the organizing committee and the teachers themselves. Researchers observed a series of activities that were followed by

teachers of various ages in PAI subjects. The data obtained and the problems that arose were discussed in semistructured interviews with the PPG teacher participants. Since all observed teachers agreed to be observed well in advance, it must be assumed that they were in the best condition when participating in PPG activities. The first series of observations focus on appropriate pedagogical competencies such as teacher use of ICT in the classroom and identifying generic ICT skills. The second series of observations focus on personality competence, the third series of observations emphasize social competence, and the fourth series of observations focus on professional competence. As notes, 'at the end of the data collection stage, we have collected data. Still, we have also established several hypotheses, constructs, or categories that begin to explain what happens during the PPG activity (Hopkins, 2008). Although not all 'competencies' were witnessed in every action, the first draft of a series of competency observations was developed, which describes the transition from a novice teacher to a certified teacher.

Observations were also made on several research results in Indonesia regarding the application of skills that have been applied in the last five years, government regulatory documents related to CPD, and several articles on sustainable professional development. This was done to critically review the published evidence from teachers' experiences in their professional improvement activities regarding pedagogic competence, personality competence, social competence, and professional competence. The literature search was carried out in the Scopus, Crossreff, and Google databases from their inception up to December 2021. Each search was constructed differently to use the relevant search terms or keyword headings for each database. All searches essentially terms found, such as teacher certification, teacher professional education (Pendidikan Profesional Guru-PPG), or the like and teacher collective activities such as Teacher Working Groups (Kelompok Kerja Guru-KKG), Subject Teacher Consultations (Musyawarah Guru Mata Pelajaran-MGMP). All searches essentially combined all (and their truncated forms): ("Continuing professional development" OR "CPD" OR "Continuing education" OR "CE") AND ("Teacher "). The collected data was then analyzed in stages through data reduction, presentation, and verification (Miles et al., 2019). Data reduction is done by selecting the relevant data and putting aside irrelevant information. The results will then be presented by elaborating and describing the trend of significant professional competence among teachers, as well as the evolution of the TSP teacher professionalism model discovered during field research. For easier comprehension, data might be presented in flowcharts, diagrams, or other graphic representations. The presentation of data that is easy to understand will facilitate the subsequent analysis process. The last step of data processing is making conclusions and verifying the data. The initial conclusions made are provisional but will change if no evidence or data is found to support these conclusions. The data obtained must be tested for credibility through the validity the data. This validity test refers to the stability of respondents' responses to several characteristics of the teacher's substantial competency data. This can be improved by using detailed field notes at the observation stage and semi-structured interviews. In the data validity test, the researcher refers to the trustworthiness initiated by Lincoln and Guba (as cited in Nowell et al., 2017). According to them, the trustworthiness of a study is equivalent to internal validity, external validity, reliability, and objectivity. This trustworthiness requires data authenticity, data transferability, data dependability, and data confirmation

Findings/Results

Teacher Professionalism

The literature review inspired the author to focus on several competencies in teacher professionalism, namely pedagogical, personal, social, and professional competencies. In this paper the term core competence (*Kompetensi Inti–*KI) is used. Pedagogical competence is coded KI 1, personality competence is coded KI 2, social competence is coded KI 3, and professional competence is coded KI 4. This categorization of competence is in line with expert opinion explained in the theoretical framework above and follows the application model of TSP skills to be developed.



Figure 2. The Interval Scale of Teacher Professionalism Substantial Competence

The scores are resulted from the questionnaire responses analysis. These conditions are depicted in Figure 3 below and is based on Table 2. The starting point for this paper is that efforts for increasing teacher professionalism haven't yet achieved optimal results. Based on data collected from 202 teachers in the second stage on the substantial competence of teacher professionalism, several aspects of teacher competence can be feasibly achieved, but to date, their

achievement has fallen short. These second-stage aspects of competence include the ability to communicate, evaluate, self-performance, maintain a work ethic, act responsibly, have a noble character and serve as role models for students and the community. In addition to these competencies, the four other aspects of competence still need to be improved, namely mastery of learning theory and educational learning principles (KI 1.2), exploration of student potential (KI 1.6), creativity in developing subject matter (KI 4.3), and optimizing information and communication technology for the learning process (KI 4.5). These four core competencies occupy the lowest average scale with respective scores of 3.6, 3.6, 3.7, and 3.7.

Based on observations and interview data, teacher Professional Education activities in KI 1, it was found that almost all subjects tended to lack mastery of learning theory and educative learning principles. Most of the subjects felt it was just a theory. Subject R5 stated that learning theory is essential, but conditions in the field often do not match the theory. The same thing was conveyed by subject R11, who stated that teachers know the principles of educative learning but have difficulty implementing them. Furthermore, subject R17 stated that the learning process should flow just like that, without bothering to apply educative learning theories and principles, even though they had mastered them. The results of observations in KI 1.6 show that the competence of teachers in facilitating the development of student potential is still deficient. Almost all subjects stated that they had not yet become good facilitators in class.

Subject R8 stated that required facilities and infrastructure were not yet available, which were impediments to teachers being able to become good facilitators. A contrasting opinion was conveyed by R13, who argued that teachers can still explore the best potential of students by utilizing the environment around the school and in collaboration with other stakeholders like the government and private institutions for having students study tour or even internship programs. Furthermore, the stated the basic competency KI 4.3, "design learning resources that are artistically guided" is not feasible. Most of the subjects objected to using their creativity in developing the learning materials. R1 stated that he was used to using existing materials. This is reinforced by R15, who stated that using finished materials for the subject matter is more practical than spending time to develop it. The respondents did not creatively develop materials for their subject matter because they were used to using practical, ready-made materials. This situation was also was evident with achieving KI 4.5, "make use of information and communication technologies to communicate and grow", as most subjects fell short of achieving this competency. R2 stated that the new technology was used for making PowerPoint presentations and typing on a laptop only; the rest of the teaching process remained with the lecture method. R14 conveyed a contrasting statement and said respondent constantly innovates in using technology and seeks information on using the latest technology for learning.

Furthermore, the lack of substantial teacher competence is caused by implementing the skill application models that have not been integrated. However, it needs to be conveyed that the competence of teachers in other aspects is already in the excellent category. An example is communicating effectively and behaving following applicable religious, legal, social norms.

Implemented Skill Applications

The CPD model is still being applied to education in Indonesia. The continued professional development of teachers beyond their initial training, certification, and induction has been characterized as this application model (Morgan & Neil, 2004). According to this definition, professional development occurs throughout initial teacher training, and CPD continues that result after a teacher certificate is obtained. However, this simple definition conceals the reality of an unclear and contested idea, as seen by the diverse viewpoints and attitudes regarding aims and advantages (Friedman & Phillips, 2004). In the face of a rising educational sector and globalization, CPD has been lauded as a crucial teacher practice component for maintaining and increasing standards (Ushie, 2009). It is unquestionably owing to the CPD's endorsement from important supranational organizations like as the Organization for Economic Cooperation and Development (OECD). Coolahan (2002), for example, argues in a study for the OECD that the significant purpose of teacher professional development is to fulfill the needs of globalization. Coolahan puts CPD on the lifelong learning agenda. According to Fraser et al. (2007), this somewhat rigorous neoliberal notion has been criticized due to its conceptual vagueness. The goal of the CPD model is to provide teachers with the necessary abilities to implement government regulations and policies and educate, participate in, and critique policies. It can be found in the literature that CPD is linked to educational and school reforms (Little, 1993; Popov Ed. et al., 2013). According to Little (1993), teachers are frequently considered as a way to implement reform or policy change because of the CPD model. It can be used to pose inquiries about the activity's underlying goals. As a result, the proposal is to assess teacher competency in preparing individual and group teachers to behave as well-informed reformers, champions, and critics of reform.

The dualism of the objectives of the CPD model will lead to very different interpretations and implementations. The CPD model is assumed to prepare teachers for reform, aligning themselves with training and rewarding. Meanwhile, the deficit model discussed earlier supports the transmission view of CPD. CPD, which, as previously said, may be regarded as assisting teachers in participating to and changing practice and policy in education, will more readily connect itself with action research and transformational models. The other three approaches (coaching/mentoring, standards-based, and community of practice) can all be classified as 'transition' categories. They can support a fundamental agenda that is compatible with one of the two objectives of the CPD.

Table 2. Spectrum of the CPD Model

CPD Models	Model goals	
Model of instruction	Transmission	
Model that pays off		
Model of deficit		
Model of a cascade		1
Model of standards-based	Transition	Personal capacity
Model of mentoring (pendampingan)		building of
Model of practice based community		teachers
Model of action research	Transformation	Τ
Model of transformation		
(Kennedy, 2005, 2014)		

Table 1 shows how the CPD methodology is meant to advance teachers' capacity development from the transmission to transition to transformational categories. Meanwhile, it is understandable that professors have the opportunity to influence the agenda. Burbank and Kauchak (2003) believe that the activity parameters are still defined by external parties, such as policy stakeholders and policymakers, even in many collaborative versions of CPD, which may be represented in the 'transformation' categories above. The capacity of professional autonomy in Indonesia focuses on:

- a. Competencies identified as below standard based on self-evaluation,
- b. Several competencies that need to be cultivated have been identified by teachers,
- c. Teachers' knowledge, abilities, and competences needed for advancement in their careers/carrying out new responsibilities, such as serving as school principals.,
- d. Based on the school self-evaluation report and annual school growth plans, knowledge, skills, and materials are necessary, and
- e. Certain knowledge, abilities, and competences are of particular importance to teachers.

In accordance with the Regulation of the Minister of State for Effectiveness of State Apparatus and Bureaucratic Reform of the Republic of Indonesia Number 16 (Government of Indonesia, 2009), the CPD model to improve teacher professionalism focuses on three aspects, namely 1) innovative work, 2) scientific publications, and 3) self-development. Innovative work consists of finding appropriate technology, finding/creating works of art, making/modifying learning tools/visual aids/practicum, and following the development of the preparation of standards, guidelines, questions and the like. Scientific publication activities consist of giving presentations at scientific forums, publishing research results or scientific ideas in scientific publications, textbook publication, guidline for teacher, and enrichment books. Self-development activities are carried out in two ways, either through functional training such as teacher certification, teacher professional education (*Pendidikan Profesional Guru*-PPG), or the like and teacher collective activities such as Teacher Working Groups (*Kelompok Kerja Guru*-KKG), Subject Teacher Consultations (*Musyawarah Guru Mata Pelajaran*-MGMP), or the like. PPG is a teaching license training conducted by state government. KKG is a peer-teachers group of a subject used for sharing and discussing the development of teaching competencies and materials.

Sustainable Integrated Skill Application Model and Mentoring

Skill application models that are not well-integrated impact teacher competency development. Furthermore, schools, students, parents, and the community believe that some Indonesian teachers are unqualified (Kintamani, 2016). Furthermore, She has found that the school community judges that 21.07% of primary school (*Sekolah Dasar*–SD) teachers are thought to be eligible to teach 54.12% of junior high school teachers (*Sekolah Menengah Pertama*–SMP); 65.29% of senior high school (*Sekolah Menengah Atas*–SMA), and; 55.45% of vocational high school (*Sekolah Menengah Kejujuran*–SMK) teachers. A comprehensive skills application model which is integrated, sustained and uses Mentoring (TSP) can play a role in reversing these perceptions. This paper identifies several principles which need to be considered in determining the steps for implementing teacher professional development as a skill application model namely:

- a. Oriented to changes in teacher behavior,
- b. Encouraging increased teacher contributions,
- c. Directed at educating and training teachers before and after becoming a teacher,
- d. Designed for the development of professional abilities of teachers, and
- e. Determining steps/activities to carry out continuous improvement.

With these principles, teacher professionalism can be realized in facing the challenges of change. The skill application model if appropriately implemented is capable of developing teacher professionalism and enhance teacher competence. This study offers a comprehensive model that focuses on three aspects of model design and implementation, namely integration, sustainability, and mentoring. Integration of existing skill application models, both formal, semi-formal, and informal, into a skills application system. The various existing models include PPG, MGMP, KKG, Teacher Training Workshops, and Teacher Training Workshops.

Furthermore, sustainability is the implementation of these skill application models continuously and systematically. Finally, mentoring can help teachers strengthen their creative skills in generating instructional materials. The operational definition of TSP is a skill application model that seeks to carry out integrated and sustainable teacher professional development through a structured and systematic mentoring process.



Figure 3. Sustainable, Mentoring, and Integrated Skill Application Model

The application model that accommodates the three comprehensive models can be practiced not only during the implementation of PPG, MGMP, and KKG but also in a sustainable manner. The three techniques are thought to be capable of promoting creative learning, expanding students' potential, and incorporating information and communication technology into the classroom.

Discussion

It is impossible to separate one substantial competency from another in practical education. Integrated skills development in integrated skills growth shows the linkages between competencies. In other words, a teacher's personal, social, emotional, and cognitive skills include creativity, language skills, critical thinking, collaboration, and emotional intelligence (Cristóvão et al., 2020). In addition, most studies agree that hard skills are based on soft skills and personality traits (Attakorn et al., 2014; Dubrov et al., 2020; Mailool et al., 2020; Pachauri & Yadav, 2014; Rohaeti, 2019). An Islamic education teacher, for example, must have communicative competence and respect intercultural and professional abilities. Public speaking and presentation skills are referred to as soft skills simultaneously. Even with pedagogic competence, a teacher should develop Islamic science material with noble character and be an example for students with personality competencies. So far, the existing teacher professional development activities only focus on one competency. It is also fragile in the follow-up process of the activities carried out.

By looking at some of the facts of research findings on PPG participants, it was found that mental attitudes tend to be destructive to self-development. Such as low teacher motivation to study continuously, difficulty in time management, copy-paste culture/acts of plagiarism on assigned tasks, doing assignments carelessly, and low learning independence. It is as if there is an unprepared mental attitude from these PPG participating teachers. According to Katz et al. (2011), teachers who are ready to participate in professional development have mental attitudes such as positive attitudes, sensitivity to diversity, and increased self-confidence in facilitating students, carrying out research, and working collaboratively. According to Alexopoulos et al. (2022) research findings, it is critical to change the attitude is the basis for developing the teacher's substantial competence. In addition, when looking at the evaluation results of PPG activities which stated that the results of the follow-up of the program were dull during the activity, the organizers only saw it as a common phenomenon. It will not be taken into consideration what actions will be taken so that this does not happen again. This is a factor that hinders the ineffectiveness of the results of PPG activities that have been implemented.

The study results also revealed that several factors support the effectiveness of the effects of PPG activities. The first factor is the strong coordination between PPG participating teachers, the organizers, IAIN Syekh Nurjati Cirebon, and the Ministry of Religion of the Republic of Indonesia. Strong coordination support is due to the purpose and content of the activity program following the basic needs of Islamic education teachers to become certified teachers. In other

words, there is a need for professional Islamic education teachers. The second factor is the optimistic attitude of the PPG participant teachers who do not know their age. The third factor is the existence of strength and mutual support for the program's success in PPG activities from all elements of the organizers. The last factor is the strong support from the Ministry of Religion of the Republic of Indonesia for this PPG activity. This PPG activity for Islamic education teacher participants is the only one in the city of Cirebon with the organizer of IAIN Syekh Nurjati Cirebon.

From the observed core competencies, the authors highlight three core competencies that are considered to still need to be improved. These core competencies are the minimum competencies teachers must-have in the current digital era. Although the improvement of competence, training, and motivation is continuously carried out, it has not maximally had a positive and significant impact on teacher professionalism (Yuliana et al., 2019). These three core competencies are: the ability to develop creatively guided subject matter, the ability to facilitate the development of students' potential to actualize their various potentials, the ability to utilize information and communication technology for learning purposes. These three aspects are influenced by a shift in teacher orientation from knowledge users to knowledge developers (Suryadi, 2019). This is also in line with the findings of Galeshi and Taimoory (2019). They stated that the teachers' interpersonal skills in developing teaching materials creatively, creating a positive learning environment for students, and using information and communication technology as support in the learning process could increase teachers' perceptions of professional competence. Of the three competencies, the most needed challenge for teacher professionalism in the future is the mastery of information technology (Nurdiansyah, 2017).

The above facts indicate that the competence of teachers in these three aspects needs to be improved, as well as an indication that the development of teacher professionalism requires other models. Among them are skill application models by integrating various existing patterns or models with integrated or comprehensive principles in the form of integrated, sustainable, and mentoring skill application models. An integrated development training program to improve all the substantial competencies of teachers is possible through the help of information and communication technology. This idea is in line with Dedebali (2020), which states that it is essential to review training programs according to the requirements of the digital era and support the introduction of programs in this direction. Participants can also follow up on the results after participating in sustainable teacher competency development activities. Participants can assist instructors from the organizers related to implementing the programs made anytime and anywhere.

With the development of technology, information, and communication in this digital era, programs with sustainable and assistance patterns can also be implemented by minimizing risks from the aspect of space, time, and cost. Participants can carry out teacher professional development activities freely through this TSP model. This TSP skill application model can increase the expectations of students and parents to be fulfilled, namely professional teachers and quality schools. Quality schools will contribute to achieving national education goals as mandated in the National Education System Law. Thus, creative, innovative learning can be realized, and a generation of character, integrity, and upholding tolerance according to the national identity of the Indonesian nation (Rohman & Ningsih, 2018). Some literature writes that the training of education personnel is a priority in education because teachers are the key to change (Barabasch & Watt-Malcolm, 2013; Boudersa, 2016). This is supported by various kinds of literature showing positive teacher education and training (Winterbottom, 2010). Multiple models of pre-service education for teachers at different levels have been developed, making the concepts around education, its goals, as well as roles, continue to be debated.

Conclusion

This study shows that, in general, teacher professional competence is in the excellent category and so it contests the general community belief that teacher competence is low. However, there are several aspects of competence which are still low, namely creativity in developing materials, developing potential participants, and utilizing information and communication technology. Therefore, the Integrated, Sustainable, and Mentoring Skills Application Model (TSP Model) is recommended to increase teacher professional competence. Through a systematic literature review, we can determine what skill application models have been implemented in Indonesia and how they have been implemented. So from the two results, a model was made to direct teachers to be proactive in identifying their development needs through the TSP Model.

Recommendations

This research contributes to the world of education, especially to develop the professionalism of teachers in Indonesia by offering a new concept model for the application of TSP skills to improve teacher competence in aspects of creative learning competencies, developing student potential, and utilizing information and communication technology. Therefore, it will be more optimal if further research is recommended to be carried out on certified teachers or other teachers from various backgrounds, both from private and public schools.

Limitations

The sample of this study was limited to teachers participating in the Professional In-service Teacher Education organized by Institut Agama Islam Negeri Syekh Nurjati Cirebon for Educational Personnel Education in 2021.

Participants were teachers who had not been certified as professional teachers. Due to these limitations, the results of this study are strongly influenced by the conditions of schools, communities, and current government policies.

Authorship Contribution Statement

Farihin: Conceptualization, design, analysis, writing. Suteja: Securing funding, writing. Muslihudin: Supervision, material support. Aris: Concept and design, methods. Arif: Reviewing, drafting manuscript, data analysis, data acquisition. Widodo: Supervision, critical revision of manuscript.

References

- Abdullah, M. (2018). Manajemen mutu pendidikan di sekolah peran kepemimpinan kepala sekolah, profesionalisme guru, dan partisipasi masyarakat dalam peningkatan mutu pendidikan di sekolah [Quality management of education in schools the role of principal leadership, teacher professionalism, and community participation in improving the quality of education in schools]. *Jurnal Penelitian Pendidikan 17*(3), 190 198. https://doi.org/10.17509/jpp.v17i3.9612
- Alexopoulos, N., Rogari, G., & Raptis, N. (2022). Behavioral factors affecting the acclimatization of newly-appointed teachers in primary schools: an empirical investigation. *International Journal of Educational Methodology*, 8(1), 39–54. <u>https://doi.org/10.12973/ijem.8.1.39</u>
- Ardipal, A. (2012). Peningkatan kualitas guru anak usia dini dalam upaya pengembangan sumber daya manusia berkualitas di masa depan [Improving the quality of early childhood teachers in efforts to develop quality human resources in the future]. *Komposisi: Jurnal Pendidikan Bahasa, Sastra, dan Seni, 10*(2), 68-74. https://doi.org/10.24036/komposisi.v10i2.64
- Attakorn, K., Tayut, T., Pisitthawat, K., & Kanokorn, S. (2014). Soft skills of new teachers in the secondary schools of Khon Kaen secondary educational service area 25, Thailand. *Procedia Social and Behavioral Sciences*, *112*, 1010-1013. https://doi.org/10.1016/j.sbspro.2014.01.1262
- Babinski, L. M., Amendum, S. J., Knotek, S. E., Sánchez, M., & Malone, P. (2018). Improving young english learners' language and literacy skills through teacher professional development: A randomized controlled trial. *American Educational Research Journal*, 55(1), 117-143. <u>https://doi.org/10.3102/0002831217732335</u>
- Barabasch, A., & Watt-Malcolm, B. (2013). Teacher preparation for vocational education and training in Germany: A potential model for Canada? *Compare*, *43*(2), 155-183. <u>https://doi.org/10.1080/03057925.2012.661216</u>
- Becker, H. S. (1958). Problems of inference and proof in participant observation. *Source American Sociological Review*, 23(6), 652–660. <u>https://doi.org/10.2307/2089053</u>
- Beyer, L. E. (2002). The politics of standardization: teacher education in the USA. *Journal of Education for Teaching*, 28(3), 239-245. <u>https://doi.org/10.1080/0260747022000021377</u>
- Boudersa, N. (2016). The importance of teachers' training programs and professional development in the Algerian educational context: toward informed and effective teaching practices. *Expériences Pédagogiques*, *1*. https://bit.ly/3yuch7S
- Burbank, M. D., & Kauchak, D. (2003). An alternative model for professional development: Investigations into effective collaboration. *Teaching and Teacher Education*, *19*(5), 499-514. <u>https://doi.org/10.1016/S0742-051X(03)00048-9</u>
- Cappa. (2020). Meningkatkan kompetensi guru menyusun rencana pelaksanaan pembelajaran berorientasi pada keterampilan berpikir tingkat tinggi (higher order thinking skill) dalam pembelajaran tematik melalui bimbingan dan latihan pada kelompok kerja guru (KKG) [Improving teacher competence in developing learning implementation plans oriented to higher order thinking skills in thematic learning through guidance and training in teacher working groups (KKG)]. *Didaktika: Jurnal Kependidikan*, *9*(3), 319–328. https://bit.ly/39G5Rbd
- Chalkley, T. W., & Nicholas, D. (1997). Teachers' use of information technology: observations of primary school classroom practice. *Aslib Proceedings*, *49*(4), 97–107. <u>https://doi.org/10.1108/eb051455</u>
- Chesnut, S. R., & Burley, H. (2015). Self-efficacy as a predictor of commitment to the teaching profession: a metaanalysis. In *Educational Research Review* 15(2), 1-51. <u>https://doi.org/10.1016/j.edurev.2015.02.001</u>
- Christiansen, L. B., Clausen, K., Smedegaard, S., & Skovgaard, T. (2021). A qualitative exploration of implementation, adaptation, and sustainability of a school-based physical activity intervention: move for well-being in school. *SAGE Open* 11(1), 1-12. <u>https://doi.org/10.1177/21582440211000053</u>
- Coolahan, J. (2002). *Teacher education and the teaching career in an era of lifelong learning.* (No. 2; OECD education working papers). OECD iLibrary. <u>https://doi.org/10.1787/226408628504</u>

- Cristóvão, A. M., Candeias, A. A., & Verdasca, J. L. (2020). Development of socio-emotional and creative skills in primary education: teachers' perceptions about the gulbenkian xxi school learning communities project. *Frontiers in Education*, *4* (160), 1-12. <u>https://doi.org/10.3389/feduc.2019.00160</u>
- Danasasmita, E. K. (2015). Continuing professional development for the personnel of vocational school in Indonesia. In
 A. G. Abdullah, T. Aryanti, D. Kurnia & S. Elvyanti (Eds.), *Proceedings of the 3rd UPI International Conference on Technical and Vocational Education and Training* (pp. 54-57). Atlantis Press. <u>https://doi.org/10.2991/ictvet-14.2015.13</u>
- Davies, D. (2000). Developing teachers: the challenges of lifelong learning. *Educational Review*, 52(1), 90-91. https://bit.ly/3KWYUzC
- Day, C. (1999). Developing teachers: the challenges of lifelong learning. In A. Hargreaves & I. F. Goodson (Eds.), *Educational change and development series*. Routledge.
- Day, C., & Sachs, J. (2005). *International handbook of continuing professional development of teachers*. Open University Press.
- Dedebali, N. C. (2020). Analysis of digital literacy and metaphoric perceptions of teacher candidate. *International Journal of Educational Methodology*, *6*(1), 135–145. <u>https://doi.org/10.12973/ijem.6.1.135</u>
- Diana, Sunardi, Gunarhadi, & Yusuf, M. (2020). The development of i-teach model to improve early childhood teachers professionalism. *Cypriot Journal of Educational Sciences*, 15(6), 1614–1628. https://doi.org/10.18844/CJES.V15I6.5321
- Dubrov, D. V., Kochetkov, M. V., & Steklyannikov, V. Y. (2020). Employer as an Actor of Student-Centered Education: Implementation Experience. *Vysshee Obrazovanie v Rossii = Higher Education in Russia, 29*(11), 141–152. https://doi.org/10.31992/0869-3617-2020-29-11-141-152
- Eliyanto, E., & Wibowo, U. B. (2013). Pengaruh jenjang pendidikan, pelatihan, dan pengalaman mengajar terhadap profesionalisme guru SMA Muhammadiyah di kabupaten Kebumen [the effect of educational level, training, and teaching experience on the professionalism of Muhammadiyah high school teachers in Kebumen regency]. *Jurnal Akuntabilitas Manajemen Pendidikan*, *1*(1), 34-47. <u>https://doi.org/10.21831/amp.v1i1.2321</u>
- Eraut, M. (2002). Developing professional knowledge and competence. In L. Williams & H. Kirley (Eds.), *Life long learning* (1st ed.). Routledge. <u>https://doi.org/10.4324/9780203486016</u>
- Evans, L. (2011). The "shape" of teacher professionalism in England: Professional standards, performance management, professional development and the changes proposed in the 2010 white paper. *British Educational Research Journal*, *37*(5), 851-870. <u>https://doi.org/10.1080/01411926.2011.607231</u>
- Fadriati, I. A., Muafiah, E., Kamaruddin, M. Y., & Ibrahim, M. M. (2020). Experiential reflection and processing as a model for improving the competencies of islamic studies teachers. *Talent Development and Excellence*, *12*(1), 2767-2778.
- Farihin. (2021). Profesionalisme guru [Teacher Professionalism]. Zenius Publisher.
- Fitriyah, R. N. (2019). Pengembangan kompetensi guru di era revolusi industri 4.0 melalui pendidikan dan pelatihan [teacher competency development in the industrial revolution era 4.0 through education and training]. In *Prosiding Seminar Nasional Multi Disiplin Ilmu Dan Call For Papers Unisbank* [Proceedings of the Multi-Discipline National Seminar and Call For Papers Unisbank](pp. 359–364). https://bit.ly/3sownf0
- Fraser, C., Kennedy, A., Reid, L., & McKinney, S. (2007). Teachers' continuing professional development: contested concepts, understandings and models. *Journal of In-Service Education*, 33(2), 153-169. <u>https://doi.org/10.1080/13674580701292913</u>
- Friedman, A., & Phillips, M. (2004). Continuing professional development: developing a vision. *Journal of Education and Work*, *17*(3), 361-376. <u>https://doi.org/10.1080/1363908042000267432</u>
- Galeshi, R., & Taimoory, H. R. (2019). Online education: influencing teachers' perception of professionalism. *International Journal of Online Pedagogy and Course Design*, 9(4), 1-17. <u>https://doi.org/10.4018/IJOPCD.2019100101</u>
- Gitlin, L. N., Kolanowski, A., & Lyons, K. J. (2020). Everyone needs a mentor. In S. W. Sussman & K. Dimock (Eds.), *Successful Grant Writing* (5th ed., pp. 145–172). Springer Publishing Company. <u>https://doi.org/10.1891/9780826148049.0005</u>
- Government of Indonesia. (2009). *Peraturan menteri negara pendayagunaan aparatur negara dan reformasi birokrasi nomor 16 tahun 2009* [Regulation of the state minister for empowerment of state apparatus and bureaucratic reform number 16 of 2009]. <u>https://bit.ly/3yKqM7N</u>
- Hoban, G. J., & Hoban, G. F. (2002). Teacher learning for educational change: A systems thinking approach. Open

University Press.

Hopkins, D. (2008). A teacher's guide to classroom research. Open University Press.

- Katz, P., McGinnis, J. R., Hestness, E., Riedinger, K., Marbach-Ad, G., Dai, A., & Pease, R. (2011). Professional identity development of teacher candidates participating in an informal science education internship: A focus on drawings as evidence. *International Journal of Science Education*, 33(9), 1169–1197. https://doi.org/10.1080/09500693.2010.489928
- Kelly, P., & Williamson, M. (2002). Decentralisation of professional development: teachers' decisions and dilemmas. *Journal of In-Service Education*, *28*(3), 409-426. <u>https://doi.org/10.1080/13674580200200189</u>
- Kennedy, A. (2005). Models of continuing professional development: a framework for analysis. *Journal of In-Service Education*, *31*(2), 235-250. <u>https://doi.org/10.1080/13674580500200277</u>
- Kennedy, A. (2014). Understanding continuing professional development: the need for theory to impact on policy and practice. *Professional Development in Education*, *40*(5), 688-697. <u>https://doi.org/10.1080/19415257.2014.955122</u>
- Kintamani, I. (2016). *Analisis sumber daya manusia pendidikan dasar dan menengah 2015/2016* [Analysis of human resources for primary and secondary education 2015/2016]. Pusat Data dan Statistik Pendidikan dan Kebudayaan/ Center for Education and Culture Data and Statistics. <u>http://repositori.kemdikbud.go.id/22852/</u>
- Klassen, R. M., & Chiu, M. M. (2011). The occupational commitment and intention to quit of practicing and pre-service teachers: Influence of self-efficacy, job stress, and teaching context. *Contemporary Educational Psychology*, *36*(2), 114-129. <u>https://doi.org/10.1016/j.cedpsych.2011.01.002</u>
- Kraft, M. A., & Christian, A. (2022). Can teacher evaluation systems produce high-quality feedback? An administrator training field experiment. *American Educational Research Journal*, 59(3), 500-537. https://doi.org/10.3102/00028312211024603
- Krzychała, S. (2020). Teacher responses to new pedagogical practices: a praxeological model for the study of teacherdriven school development. *American Educational Research Journal* 57(3), 979-1013. <u>https://doi.org/10.3102/0002831219868461</u>
- Kuncahyono, K., & Kumalasani, M. P. (2019). Pengembangan softskill teknologi pembelajaran melalui pembuatan emodul bagi guru sekolah dasar [Development of learning technology softskills through making e-modules for elementary school teachers]. *Terampil: Jurnal Pendidikan dan Pembelajaran Dasar*, 6(2), 128–139. https://doi.org/10.24042/terampil.v6i2.5272
- Kusen, K., Hidayat, R., Fathurrochman, I., & Hamengkubuwono, H. (2019). Strategi kepala sekolah dan implementasinya dalam peningkatan kompetensi guru [Principal's strategy and implementation in improving teacher competence]. *Idaarah: Jurnal Manajemen Pendidikan*, *3*(2), 175–193. <u>https://doi.org/10.24252/idaarah.v3i2.7751</u>
- Liakopoulou, M. (2011). Teachers' pedagogical competence as a prerequisite for entering the profession. *European Journal of Education*, 46(4), 474–488. <u>https://doi.org/10.1111/j.1465-3435.2011.01495.x</u>
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, *15*(2), 129–151. <u>https://doi.org/10.3102/01623737015002129</u>
- Mailool, J., Retnawati, H., Arifin, S., Kesuma, A. T., & Putranta, H. (2020). Lecturers' experiences in teaching soft skills in teacher profession education program (tpep) in indonesia. *Problems of Education in the 21st Century*, *78*(2), 215-234. <u>https://doi.org/10.33225/pec/20.78.215</u>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2019). Qualitative data analysis. Arizona State University.
- Morgan, C., & Neil, P. (2004). Continuing professional development for teachers: from induction to senior management. In S. Stephens, S. Halliwell, V. Mclver, & R. Downey (Eds.), *Teachers & teacher education* (1st ed.). Routledge. <u>https://doi.org/10.4324/9780203416785</u>
- Myori, D. E., Hidayat, R., Eliza, F., & Fadli, R. (2019). Peningkatan kompetensi guru dalam penguasaan teknologi informasi dan komunikasi melalui pelatihan pengembangan media pembelajaran berbasis android [improving teacher competence in mastering information and communication technology through android-based learning media development training]. *Jurnal Teknik Elektro Dan Vokasional, 5*(2), 96-101. <u>https://bit.ly/3P9ANku</u>
- Nafis, H., Rusdinal, Ananda, A., Khairani, & Satria, H. (2019). Influence of profesional teacher competence, self concept, interest learning, and early to learning outcomes mathemathics. *International Journal of Innovative Technology and Exploring Engineering*, 8(10), 3857–3862. <u>https://doi.org/10.35940/ijitee.J9893.0881019</u>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1) 1-13. <u>https://doi.org/10.1177/1609406917733847</u>

- Nurdiansyah, A. S. (2017). *Profesionalisme guru dan tantangan kedepan dalam peningkatan mutu pendidikan pada era global* [Teacher professionalism and future challenges in improving the quality of education in the global era]. Pascasarjana Universitas Negeri Malang. <u>https://bit.ly/39H5sVY</u>
- Oolbekkink-Marchand, H. W., Hadar, L. L., Smith, K., Helleve, I., & Ulvik, M. (2017). Teachers' perceived professional space and their agency. *Teaching and Teacher Education*, *62*, 37-46. <u>https://doi.org/10.1016/j.tate.2016.11.005</u>
- Orgoványi-Gajdos, J., & Kovács, E. (2020). Teachers' views about the characteristics of pedagogical talents. *Acta Educationis Generalis*, *10*(2), 78-94. <u>https://doi.org/10.2478/atd-2020-0011</u>
- Pachauri, D., & Yadav, A. (2014). Importance of soft skills in teacher education programme. *International Journal of Educational Research*, 5(1), 22–25. <u>https://bit.ly/3M9yxI4</u>
- Pantić, N., Wubbels, T., & Mainhard, T. (2011). Teacher competence as a basis for teacher education: comparing views of teachers and teacher educators in five western balkan countries. *Comparative Education Review*, *55*(2), 165–188. https://doi.org/10.1086/657154
- Permatasari, I., & Sobandi, A. (2019). Profesionalisme guru sebagai determinan terhadap prestasi belajar siswa [teacher professionalism as a determinant of student achievement]. *Jurnal Pendidikan Manajemen Perkantoran, 4*(2), 182-189. <u>https://doi.org/10.17509/jpm.v4i2.18013</u>
- Popov, N., Wolhuter, C., Almeida, P. A., Hilton, G., Ogunleye, J., & Chigisheva, O. (Eds.). (2013). *Education in one world: perspectives from different nations*. Bulgarian Comparative Education Society. <u>https://bit.ly/3kXVlyr</u>
- Prasertcharoensuk, T., Somprach, K., & Ngang, T. K. (2015). Influence of teacher competency factors and students' life skills on learning achievement. *Procedia Social and Behavioral Sciences, 186,* 566-572. https://doi.org/10.1016/j.sbspro.2015.04.021
- Purdon, A. (2003). A national framework of cpd: continuing professional development or continuing policy dominance? *Journal of Education Policy*, *18*(4), 423–437. <u>https://doi.org/10.1080/0268093032000106866</u>
- Rahayu, G. D. S., & Firmansyah, D. (2018). Pengembangan pembelajaran inovatif berbasis pendampingan bagi guru sekolah dasar [development of mentoring-based innovative learning for elementary school teachers]. *Abdimas Siliwangi*, 1(1), 17–25. <u>https://doi.org/10.22460/as.v1i1p17-25.36</u>
- Rhodes, C., & Beneicke, S. (2002). Coaching, mentoring and peer-networking: challenges for the management of teacher professional development in schools. *Journal of In-Service Education*, 28(2), 297-310. https://doi.org/10.1080/13674580200200184
- Robert, V., Bullough, R. T., & Hall-Kenyon, K. M. (2012). On teacher hope, sense of calling, and commitment to teaching. *Teacher Education Quarterly*, *39*(2), 7-27. <u>https://bit.ly/3NbvijD</u>
- Rohaeti, E. E. (2019). Building students' hard and soft skills through innovative teaching approaches to mathematics. *Journal of Southwest Jiaotong University*, 54(5), 1-16. <u>https://doi.org/10.35741/issn.0258-2724.54.548</u>
- Rohman, A., & Ningsih, Y. E. (2018). Pendidikan multikultural : penguatan identitas nasional di era revolusi industri 4.0 [Multicultural education: strengthening national identity in the era of the industrial revolution 4.0]. *Prosiding Seminar Nasional Multidisiplin, 1,* 44–50. <u>https://bit.ly/3yKr3Yn</u>
- Sahari, S. (2018). Pengaruh pendidikan, pelatihan, dan pengalaman mengajar terhadap profesionalisme guru [The effect of education, training, and teaching experience on teacher professionalism]. *Jurnal Ilmiah Iqra'*, 9(1), 63-86. https://bit.ly/3w0qpEc
- Santoso, F. B. (2018). Pengembangan kompetensi guru di era revolusi industri 4.0 [teacher competency development in the industrial revolution 4.0]. In V. Sholihah (Ed.), *Seminar nasional Revitalisasi manajemen pendidikan anak usia dini (paud) di era revolusi industri 4.0 pengembangan* [National seminar Revitalizing early childhood education (PAUD) management in the industrial revolution 4.0 era development] (pp. 108–115). Fakultas Ilmu Pendidikan Universitas Negeri Malang. <u>https://bit.ly/3FAKXq7</u>
- Shaffer, L., & Thomas-Brown, K. (2015). Enhancing teacher competency through co-teaching and embedded professional development. *Journal of Education And Training Studies 3*(3), 117-125. https://doi.org/10.11114/jets.v3i3.685
- Siregar, T. R. A., Iskandar, W., & Rokhimawan, M. A. (2020). Literasi sains melalui pendekatan saintifik pada pembelajaran IPA SD/MI di abad 21 [Science literacy through a scientific approach to IPA SD/MI science learning in the 21st century]. *Modeling: Jurnal Program Studi PGMI*, 7(2), 243-257. <u>https://bit.ly/3w0qtUs</u>
- Sudrajat, J. (2020). Kompetensi guru di masa pandemi covid-19 [Teacher competence during the covid-19 pandemic]. *Jurnal Riset Ekonomi dan Bisnis*, *13*(2), 100-110. <u>https://doi.org/10.26623/jreb.v13i2.2434</u>

- Suhandiah, S., Sudarmaningtyas, P., & Ayuningtyas, A. (2019). Pelatihan e-learning bagi guru untuk optimalisasi pembelajaran generasi z [e-learning for teachers for optimizing learning in z generation]. *Aksiologiya: Jurnal Pengabdian kepada Masyarakat,* 4(1), 108-117. <u>https://doi.org/10.30651/aks.v4i1.3470</u>
- Sunhaji, S. (2016). Synergy of teacher profesionalism development of the quality of education. *International Conference* of Moslem Society, 1, 1–12. <u>https://doi.org/10.24090/icms.2016.1812</u>
- Suryadi, D. (2019). *Landasan filosofis penelitian desain didaktis (DDR)* [Philosophical foundations of didactic design research (DDR)]. Pusat Pengembangan DDR Indonesia.
- Sutyitno, I. (2012). Pengembangan pendidikan karakter dan budaya bangsa berwawasan kearifan lokal [Development of national character and culture education with local wisdom]. *Jurnal Pendidikan Karakter, 2*(1), 1–13. https://bit.ly/3N56lGf
- Syahroni, M., Dianastiti, F. E., & Firmadani, F. (2020). Pelatihan media pembelajaran berbasis teknologi informasi untuk meningkatkan keterampilan guru dalam pembelajaran jarak jauh [information technology-based learning media training to improve teacher skills in distance learning]. *International Journal of Community Service Learning* 4(3), 170-178. <u>https://doi.org/10.23887/ijcsl.v4i3.28847</u>
- Thaariq, Z. Z. A., Lindawati, L., & Puspita, R. D. (2020). Profesionalitas guru sekolah dasar dalam menghadapi ragam karakteristik belajar [Professionalism of elementary school teachers in facing various learning characteristics]. *Edubasic Journal: Jurnal Pendidikan Dasar, 2*(1), 61-71. <u>https://doi.org/10.17509/ebj.v2i1.26523</u>
- Ushie, B. C. (2009). Partnership learning: an imperative for the continuing professional development of primary school teachers in Nigeria. *Professional Development in Education*, 35(2), 285-287. https://doi.org/10.1080/13674580802532670
- Wardhana, R. A. N. (2016). Pengaruh kepemimpinan kepala sekolah, profesionalisme dan pelatihan guru terhadap implementasi kurikulum 2013 SMKN Yogyakarta [The influence of principal leadership, professionalism and teacher training on the implementation of the 2013 curriculum at SMKN Yogyakarta]. *Jurnal Akuntabilitas Manajemen Pendidikan*, 4(2), 257-269. https://doi.org/10.21831/amp.v4i2.10812
- Ware, H. W., & Kitsantas, A. (2011). Predicting teacher commitment using principal and teacher efficacy variables: An HLM approach. *Journal of Educational Research 104*(3), 183–193. <u>https://doi.org/10.1080/00220671003638543</u>
- Wenger, E. (1997). Practice, learning, meaning, identity. Training, 34(2), 38-39.
- Wenger, E. (1998). Communities of practice learning, meaning, and identity. In J. Hough & M. Darnell (Eds.), *Communities of practice*. Cambridge University Press. <u>https://doi.org/10.1017/CB09780511803932</u>
- Winterbottom, M. (2010). Trainee teachers' developing values and practice in relation to assessment. *Procedia Social and Behavioral Sciences*, *2*(2), 1860-1865. <u>https://doi.org/10.1016/j.sbspro.2010.03.999</u>
- Ybyraimzhanov, K., Zhanatbekova, N., Danikeeva, A., Abdykerimova, E., & Julkybekova, G. (2020). Pedagogical competence as means of developing the professional potential of the teacher. *Talent Development and Excellence*, *12*(1), 294–307.
- Yuliana, Y., Haryadi, H., & Anggraeni, A. I. (2019). Pengaruh kompetensi dan pelatihan guru terhadap profesionalisme guru dengan motivasi sebagai variabel intervening di MI, MTs dan SMK yayasan pesantren Darul Abror Kedungjati [The influence of teacher competence and training on teacher professionalism with motivation as an intervening variable in MI, MTs and SMK Darul Abror islamic boarding school Kedungjati]. Jurnal Ekonomi, Bisnis, dan Akuntansi, 21(1), 1–14. <u>https://doi.org/10.32424/jeba.v21i1.1288</u>
- Yusutria. (2017). Profesionalisme guru dalam meningkatkan kualitas sumber daya manusia [Teacher professionalism in improving the quality of human resources]. *Jurnal Curricula*, *2*(1), 38-46. <u>https://bit.ly/3FC5j1S</u>
- Ziphorah, R. M. (2014). Information and communication technology integration: Where to start, infrastructure or capacity building? *Procedia Social and Behavioral Sciences*, *116*, 3649–3658. https://doi.org/10.1016/j.sbspro.2014.01.818