The Kindergarten Teachers' Pedagogical Competences:
A Case Study

MUHAMAD TARIDI[1] AND AMRIN DONO[2]

Abstract

The study aimed to find out the pedagogical competence of teachers to carry out the interactions of the teaching and learning processes and to assess the development of the cognitive aspects of the children in one Indonesian kindergarten. This study used a qualitative method with the case study tradition. We highlighted the analysis of the data through transcription, coding, and thematic analyses. Findings of the study focused on three major themes including teachers' competence for planning teaching and learning programs (planning activities for teaching and learning processes and care and protection programs), teacher competence in implementing interaction or managing teaching and learning processes (learning from various resources and doing evaluation on the method used in teaching), and teachers' competence for conducting learning assessment and evaluation (test assessment and evaluation and non-test assessment and evaluation). Some recommendations for the betterment of Indonesian kindergarten education are proposed.

Keywords

Case study, kindergarten, pedagogical competence, teachers

1. *Corresponding author: Universitas Islam Negeri Sulthan Thaha Saifuddin, Jambi, Indonesia; taridi@uinjambi.ac.id
2. Universitas Islam Negeri Sulthan Thaha Saifuddin, Jambi, Indonesia

Introduction

Teachers possess the utmost significant contribution to student learning and effective educational processes (Gholami & Qurbanzada, 2016). Therefore, teachers are considered the most important factor to improve human values as well as improve educational values. While learners play roles as the center of the process of teaching and learning, teachers have significant roles to guide learners and facilitate the processes **(**Ghorbani, Jafari, & Sharifian, 2018**).** Currently, when the world is dealing with many threats of war, injustice acts, and violence, teachers cannot be parties to claim that education as the only way to improve human value; educators should be evaluated for their competence to become the ones who promote the moral responsibility for teaching universally and for sharing human values which are conducive to a culture of peace **(**Lawale & Bory-Adams, 2010; Spector, Klein, Reiser, Sims, Grabowski, & De la Teja, 2006**).** However, the challenges faced by nowadays teachers are to have a good design of teaching plans in order to diversify educational materials and approaches that are appropriate for the needs of students in line with the physical and psychological developments of the students' characteristics. The improvement of the teachers' competence in pedagogy for teaching demands that teachers have a preparation in an entirely encouragement and emphasis **(**Blazar & Kraft, 2017; Makarevics, 2008**).** Therefore, teachers should help young students feel great within a good emotion, have high self-confidence and respects as well as responsibility for everything they have done. Current teachers are demanded to be flexible and have a vision for the future education with broad-minded and interdisciplinary perspectives (UNESCO, 2002).

The current world commission on teaching under the organization for economic co-operation and development **(**OECD, 2011) stressed out that teachers around the world, in order to assist their students, should not only have the skills in teaching and doing evaluation to the process of teaching and learning or having a good examination easier, but also, improve ways of thinking such as the value of creativity, critical thinking, problem solving, decision making, and learning; develop ways of working (communication and collaboration); adapt with tools of working (digital technology or ICT); apply the teaching skills in the area of citizenship, skills for life, and responsibility for success in the modern world. Although, there have been many educational studies about teachers' competence in the current era (e.g., Blazar & Kraft, 2017; Eslamian, Jafari, & Neyestani, 2018; Gholami, Sarkhosh, & Abedi, 2016). However, few studies have been done for Indonesian context (Sofwan & Habibi, 2017). Even, fewer studies revealed the pedagogical competence of Indonesian teachers of young children. Therefore, this current study focused on Indonesian teachers' pedagogical competence in teaching young children in one Indonesian kindergarten. To achieve the purpose of the study, one major question guided this study: What is the teachers' pedagogical competence in teaching young children in one Indonesian kindergarten?

Literature Review

Teachers' beliefs, practices, and attitudes are considered to have a close relationship with teachers' strategies in coping with challenges faced within their profession as well as the

influence they bring into their classroom for learning environment, motivation, and achievement for their learners (Awang et al., 2013; Gholami et al., 2016). Applying some historically educational strategies and approaches e.g., the application of good questions, choosing appropriate educational subjects, teaching for students meta-cognitive improvement, triggering activities for critical thinking, providing more learning opportunities, facilitating valid sources, giving opportunity for comparison of ideas, discussions about the subject, and communication with students in a collaborative and cooperative environment is the way to improve the quality of education by teachers (Costa & Lowery, 1989; Driscoll, 2000; Hewson, 1996; Marzano, 2013; Meichenbaum, 1986).

Having the consideration that teachers are a very important part in education that play a very significant role for youth sustainable development (UNESCO, 2008), teachers should achieve pedagogical competences in teaching. Eslamian, Jafari, and Neyestani (2018), Korsun, (2017), and Reid and Hovrathora (2016) stated that in order to achieve learners' development, educational institutions need competent teachers in pedagogy. Becoming competent in teaching as a profession shows a person to have used particular information, analysis and decision making, creativity, ability to work in a team, effective communication, and good adaptability skills. Many studies (e.g., Aleinikov, 2002; Castro, Kelly, & Shih, 2010; Cheetham & Chivers, 2004; Cochran-Smith & Susan, 1999; Darling, Hammond, & Bransford, 2005; Hoffmann, 2006; Rohani, 2004; Schmoker, 2006; Zhu & Wang, 2014) have informed the pedagogical competence criteria. Each study classifies the competencies into different categories and differently assesses them from its own perspectives.

In childhood context, referring to Indonesian ministry of education, Diknas (2006,) the standards for early childhood education for the teachers' pedagogical competences are: 1) planning activities for education, care and protection programs; 2) carrying out the process of education, care and protection and 3) carrying out an assessment of the process and results of education, care and protection. Meanwhile, Rohani (2004) found that the pedagogical competence of teachers in developing cognitive aspects of kindergarten children is planning education, caring and protection program activities. planning is a thought or preparation to carry out the work or to take a decision on what will be carried out by someone to achieve certain goals as determined by a procedure or steps that are systematic by paying attention to the principles of carrying out the task/work and specifying goals and visualizing the results to be achieved. Planning involves the ability to know how to system work and to find the resources and information. This is also the same as Schmoker's (2006) statement, "the professional learning community requires teachers to establish an important and concise joint curriculum, and then teach it to students in a mutually agreed schedule (p. 102).

Additionally, carrying out assessment and evaluation on the processes and outcomes of education, as well as care and protection is also one of the teachers' responsibilities (Graff & Karsten, 2012; Orr, Pecheone, Snyder, Murphy, Palanki, Beaudin, & Buttram, 2018). Diknas (2006) defines assessment as the process of gathering and processing information to determine the level of achievement of a child's development which includes assessment techniques namely observation, assignment, performance, anecdotal recording, conversation/dialogue, parental reports, and documentation of children's work (portfolio) as well as descriptions of children's profiles. Kunandar (2007) also informed that assessment

relates to information about a person in an activity, time or certain stimulants. Information is obtained comprehensively and based on certain rules. This information is not only useful for individuals who are assessing but also for other related parties such as parents. Assessment of learning includes making considerations about services, values or benefits of a program, process and learning outcome assessment is a systematic process that contains information in order to analyze and interpret the information to make decisions.

Methodology

Research design, research site, sampling, and participants

For this study, a qualitative case study approach was applied (Forrester, & Sullivan, 2018; Creswell, 2014) to examine the experiences and voices of Indonesian teachers of kindergarten related to their pedagogical competence in one Indonesian kindergarten since the quantitative approach e.g. surveys and experimental may not address in-depth information in order to obtain the objectives of this study. Creswell (2014) and Hancock and Algozzine (2016) state that a case study includes the study of an issue or a topic that is done through one or more cases in the circle of a bound system. Furthermore, Ridder (2017) noted that a qualitative case study was a holistic exploration, explanation, and analysis as well as elaboration of a bounded system or phenomenon such as a person, a program, an institution, and a process as well as a policy. In this study context, the focus of the research was on the exploration of some Indonesian teachers. Additionally, we focused on exploring the experiences of Indonesian teachers in teaching young children in one Indonesian kindergarten related to their pedagogical competences.

We did the current research at one Indonesian kindergarten that has more than 210 students. The participants of the interview in this study were chosen using a convenience sampling strategy (Moser & Korstjens, 2018; Schreier, 2018) that consisting of the head of the kindergarten, classroom teachers, and subject teachers. We obtained permission from the ministry of education, Jambi province. The names of the research objects such as people, places, and research sites involved in this research were masked through the use of pseudonyms; it is related to the protection of the participants' rights. In this study, a purposeful sampling with a convenience case strategy was applied which is defined as convenience cases representing sites or individuals where researchers can access and do data collection to collect the data (Creswell, 2014). The five participants were a headmaster (HM), two class teachers (T1 & T2), and two subject teachers (ST1 & ST2).

Data collection

The collection of the main data of this study was conducted through a semi-structured interview (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015) done individually with each teacher from forty-five minutes to one hour at the research site from September to December 2018. The interview series were not done for once at the same set of situation; the series were done through the agreement with the participants' time and place they were willing to be interviewed. During the interview, we began asking participants

to talk about their experiences related to their teaching activities from the planning process to evaluation process. We, then, interviewed them to answer more specific questions related to our research inquiry, including their capacity in conducting teaching in their classes and the ways they evaluated the teaching and learning process. All teachers were interviewed using *Bahasa Indonesia.* The interviews were then audio-taped, and directly transcribed verbatim. We also applied a demographic background survey to obtain participants' backgrounds including age, gender, major, and other related information.

Data analysis

We first analyzed the demographic information data in a descriptive way. In addition, the interview data were subsequently transcribed for each participant. Following the step, the data were then analyzed through the constant comparative approach (Glaser & Strauss, 1967). The analysis was done in the circle of the five participants' transcripts. The analysis also covers the area of similarity and difference comparison. The transcripts were carefully read line-by-line to find regularities and themes as well as subthemes emerged among the data. When all the data have been through all codification and analysis process, the identification was begun in order to recognize the themes and sub-themes in favoring us explaining the research. When the process of theme and sub-theme recognition, we also eliminated and reduced repetitive data. We used a pattern coding to find mostly repetitive patterns of statements and consistencies among participants. This approach was chosen as it helped us to find patterns and regularity of the talks and statements from the participants.

To ensure "trustworthiness" (Lincoln & Guba 1985, p. 300) of this study, the interview results were returned to the participants to be cross checked as part of member checking procedure (Mukminin, 2012; Mukminin, Ali, & Ashari, 2015). Ensuring the participants' agreement of the data that would be elaborated was done to assess the trustworthiness. As a result, the participants agreed and allowed the use of the data for this study. The checking procedure was also conducted with some colleagues of ours.

Findings

We divided the results of the study into themes three major; teachers' competence for planning teaching and learning programs, teachers' competence for implementing teaching materials and managing teaching and learning process, and teachers' competence for conducting learning assessment and evaluation.

Table 1. *Themes and sub-themes*

Themes	Sub-themes
Teachers' competence for planning teaching and learning programs	Planning activities for teaching and learning process
	Care and protection programs
Teachers' competence for implementing teaching materials and managing teaching and learning process,	Learning from various resources
	Doing evaluation on the method used in teaching

Teachers' competence for planning teaching and learning programs

The pedagogical competence of teachers in the development of cognitive aspects is carried out by planning activities for teaching and learning process and care and protection programs. To plan the activities for the activity of teaching and learning is defined as planning at a specified time period that contains the activities that will be done by the teachers in their instructional activities. The planning is done to coordinate the learning components. Regarding to this issue, HM stated,

> "As I always observe, in planning the activity for the teaching and learning process, teachers in this school always prepare several things namely doing lesson plan for daily, weekly, and monthly schedule."

Teaching preparation is an effort to estimate actions to be taken in learning activities. For the success in implementing a curriculum or syllabus, the teacher continues to manage the program starting from the planning of learning, the identification of the standards of competence, basic competences, subject matters, learning activities, tools and sources of learning as well as assessment of learning. One of the participants said,

> "To do learning in the classroom, I prepare several things such as doing preparation for standard competences, basic competences, subject matter, learning activities, tools and learning resources as well as assessment of learning."

Regarding care and protection programs in the kindergarten, the teachers according to the headmaster have treated their students according to the stage of development. Kindergarten education is given to children as preparation for the children before entering primary education.

> "Many teachers here already understand the foundations of education; legal, historical, economical, philosophical, socio-cultural and psychological foundations. However, few teachers have difficulties in completely comprehending the foundationd. It is related to care and protection programs that should be carried out in providing good education for the young children." (HM)

From the explanation of the principal above, it is known that there are still teachers who do not understand the foundations of education for kindergarten students in order to give a full protection to the young children they teach.

Teacher competence for implementing materials and managing teaching and learning process

The planning should be well-implemented. Teachers' competence in implementing or managing teaching and learning process is a complex ability **(**Cochran-Smith & Susan, 1999). In relation to this issue, some teachers said that they have done maximal efforts to conduct the planning effectively and efficiently by implementing some strategies that they learned from various learning resources as it is quoted by two of the teachers,

> "I used the Internet mostly to know more about how to teach young children as it is planned in the lesson plan." (ST1)

> "Trainings conducted by the ministry of education is quite effective for us, in-service teachers, in implementing the lesson plan we have. I am saying that it is effective; however, it is not many as I remember I only attended little training during my working time here, around 5 years." (T1)

Students can learn in different ways in every level of development. Learning modalities and styles concern over the different ways of teaching or different teaching strategies where individuals learn on their most comprehensive ways. For instance, the visual learners can have better performance from learning experiences including the use of visual images and watching than from listening speech. The kinesthetic learner benefits active teaching and learning process while the auditory learner responds maximally to verbal commands. One of the participants (ST2) informed that the ability to implement appropriate strategies during teaching and learning process in the kindergarten classroom determine the success of the teaching. In addition to the implementation of the teaching and learning in the kindergarten classes, the teacher has also realized that methods used in teaching and learning process influence the implementation of the lesson planning. This has led the teachers to do evaluation on the methods they used while teaching. Two participants in the interview reported,

> "A lot methods that can be applied in my teaching activities, for example, when I teach Iqro [Al- Qur'an reading], some spelling methods offered by the Internet. As I teach it for almost two years, I always do evaluations on the best way to teach Iqro in my class." (T1)

> "The method used by the teachers should always be evaluated. This is not only the teachers' responsibility but also other stake holders' including me as the headmaster. This, therefore, relates to the teachers' competences in implementing the planning into the action." (HM)

In addition to the method evaluation, the participants of this study also reported that some problems emerged in implementing learning materials and managing teaching and learning process namely limited learning materials and access to the Internet as well as lack of

training. Specifically, one of the participants said that no initiatives had been made to minimize the problems such as lack of art media for the students to learn while they need the media to keep active in the classroom.

Teachers' competence for conducting learning assessment and evaluation

Assessment and evaluation especially in kindergarten education are very significant components of teaching and learning activities. Assessment is the process of information documentation and collection on individual student learning. Meanwhile, evaluation is the analysis, reflection and summarizing process in order to make decisions based on the documentation and collection of information. The purpose of assessment aims at informing teaching and improves learning. Therefore, assessment of learning and assessment for learning are fundamental parts in the kindergarten classroom. Regarding to this process, this study proposes this as important theme within the two sub-themes; test and non-test assessment and evaluation.

The evaluation of the teaching and learning activities can be done using test and non-tests. Tests can be done with oral tests, written tests, and deed tests, while non-test evaluations can be carried out through attitude scales, rules check lists, questionnaires, and portfolios. T2 stated that it is important to have the most appropriate test to evaluate students teaching and learning process and it can be done through various method; however she prefers non-test such attitude scales and portfolios. Strategies in doing the assessment and evaluation is also reported to be very important; two participants reported,

> "Doing the assessment and evaluation in my class is not easy since it needs strategies. We need to check their scores and their attitudes weekly and monthly. I believe if we can manage to report a good quality of assessment and evaluation. " (ST2)

> "I think assessment strategies should be a tool to encourage students to address their knowledge and skills, rather than focusing on their weaknesses. Focusing on children's thinking rather than a particular answer or solution provides valuable information about a child's learning. Therefore, our greatest assessment tool is a sustainable process of documenting and observing the learning process because young children perform their understanding by doing, showing and telling." (T2)

Teachers should understand that many factors affect learning and achievement through the process of assessment and evaluation. Pupils' success in performing rating what they knows or is able to do can be various. Their level of success may rely on some factors namely the time of day, situation, type of questions, familiarity with the content and their willingness to demonstrate their skills and abilities. The headmaster said that children need ample time to perform their achievements using various ways in various opportunities that are essentially appropriate and through activities that they can do independently and individually. She continued, "The rate and depth which individual child gets engaged in the kindergarten curriculum is different from beginning to end."

Furthermore, the access for teachers to see and understand students' profiles should be kept in a convenient location for the teacher to access regularly. The data of the assessment for all students should be collected by the kindergarten teacher on an on-going basis and it informs instruction throughout the year. These activities require patience, tidiness, and understanding as informed by T1 in the interview. She said that the assessment should be sustainable and the data should always be available for teachers to access and it needs our patience and tidiness as teachers.

Discussion

Children or young students learn by doing and actively engaging with materials, equipment, and people in the process of teaching and learning. Planning and creating a physical room in order to recognize the needs of development of five years olds facilitates a context for optimal teaching and learning. The management and option of classroom and specifically teaching materials in the learning environment affect the way teachers guide the development of the students and the expectations for student engagement in learning (Eslamian et al., 2018). The ways teachers prepare or plan the teaching and learning process matter; it is one of the many significant pedagogic competences in teaching activities. The findings of this study regarding teachers' competence in planning teaching and learning programs show that most teachers have conducted preparation before teaching. However, some of them still have no full understanding on the foundations of education for kindergarten students (Korsun, 2017).

Teachers' competence in implementing materials and managing teaching and learning process is an important factor in addressing the success of teaching and learning activities. Their ability and wisdom in conducting the process of teaching and learning activities have a direct impact on students' active involvement in the process. Therefore, the attempt in order to develop teachers' competence should involve the efforts of fostering positive attitudes (Awang et al., 2013). In the Indonesian context, the teachers of kindergarten have done the effort to fulfill the set of specific standards in determining the implementation of quality education for kindergarten institution (Diknas, 2006). According to the standard (Diknas, 2006) which include education curriculum, competences of teachers, educational infrastructure, organization of learning activities and educational assessment, teachers should be professional managing their class. However, based on the findings of this study, particular attention should be considered especially problems with learning material and access to the Internet that are still limited.

The kinds of strategies and tools should be applied in assessing and evaluating children's learning on an ongoing basis in the context of everyday classroom experiences. In this study, the respondents reported that test and non-test based assessment and evaluation were conducted as also reported by some previous studies (Ghorbani et al., 2018; Rohani 2004). Additionally, the strategies should be an encouragement for the teacher to support their students to show what they know and what they can do, not focusing on what they do not know or cannot do. Focusing on children's thinking rather than a particular answer or solution provides valuable information about a child's learning. The students' thoughts are proofs through their dialectics or it can be performed using their behaviors. The teacher's

best assessment and evaluation tool is a continual process of observation and documentation of learning (Aleinikov 2002; Orr et al., 2018). Therefore, they should utilize the strategies of observation and documentation in the assessment and evaluation process in kindergarten institution.

Conclusion

Children attend schools as active thinkers, owning their own natural curiosity and eagerness to search for information. The main purpose of education is to establish students to become independent, creative, and critical thinkers. Teachers as the core of education have a vital role to support this development through making capitalization on children's natural desire to explore, manipulate, and discover. Teachers are the key holders of the scientific ideas of the values and responsibilities for students and are the first parties to train them to become valuable human beings. The present study aimed at informing the pedagogical competence of teachers to carry out the interactions of the teaching and learning process and to make assessment in the development of the cognitive aspects of the children in one Indonesian kindergarten. The Findings of the study revealed Indonesian kindergarten teachers perspectives about their pedagogical competences. The teachers involved in this study reported their focus and did maximal efforts to the three activities or themes (teachers' competence for planning teaching and learning programs, teacher competence for implementing interaction or managing teaching and learning processa and teachers' competence for conducting learning assessment and evaluation). Based on the interview, some problem might disturb their teaching and learning activities. Those problems revealed including namely limited learning materials and access to the Internet as well as lack of training, lack of art media for the students to learn while they need the media to keep active in the classroom, and teachers' comprehension of factors affect learning and achievement through the process of assessment and evaluation. Indonesian government should be more attentive to these problems.

Acknowledgments

References

Aleinikov, A. G. (2002). *Mega creativity five steps to thinking like a genius.* Salem, OR: Walking Stick Press.

Awang, M. M., Jindal-Snape, D., & Barber, T. (2013). A documentary analysis of the Government's circulars on positive behavior enhancement strategies. *Asian Social Science*, *9*(5), 203.

Blazar, D., & Kraft, M. A. (2017). Teacher and teaching effects on students' attitudes and behaviors. *Educational evaluation and policy analysis*, *39*(1), 146-170.

Castro, A. J., Kelly, J., & Shih, M. (2010). Resilience strategies for new teachers in high-needs areas. *Teaching and Teacher Education*, *26*(3), 622-629.

Cheetham, G., & Chivers, G. (1998). The reflective (and competent) practitioner. *Journal of European Industrial Training*, *24*(7), 374-83.

Cochran-Smith, M., & Susan L. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, *24*(1), 249-305.

Costa, A. L., & Lowery, L. F. (1989). *Techniques for teaching thinking*. Pacific Grove, CA: Midwest Publications.

Creswell, J. W (2014). *A concise introduction to mixed methods research*. California: Sage Publications.

Darling-Hammond, L. & Bransford, J. (2005). *Preparing teachers for a changing world. What teachers should learn and be able to do*. San Francisco: Jossey-Bass

Diknas. (2006). *Pedoman Penerapan Pendekatan Beyond Centers and Circle Time (BCCT) (Pendekatan Sentra dan Lingkaran) dalam Pendidikan Anak Usia Dini*. Jakarta: Departamen Pendidikan Nasional, 4.

Driscoll, M. P. (2000). *Psychology of learning for instruction* (2nd ed.). Boston: Allyn & Bacon.

Eslamian, H., Jafari, S. E., & Neyestani, M. R. (2018). Investigating the effect of teaching aesthetic skills to faculty members on development of their effective teaching performance1. *Journal of Teacher Education for Sustainability*, *19*(2), 90-106. doi: 10.1515/jtes-2017-0016.

Forrester, M. A., & Sullivan, C. (Eds.). (2018). *Doing qualitative research in psychology: A practical guide*. California: SAGE Publications Limited.

Gholami, J., & Qurbanzada, I. (2016). Key stakeholders attitudes towards teacher education programs in TEFL: A case study of Farhangian University in Iran. *Journal of Teacher Education for Sustainability*, *18*(2), 5-20. doi: 10.1515/jtes-2016-0011.

Gholami, J., Sarkhosh, M., & Abedi, H. (2016). An exploration of teaching practices of private, public, and public-private EFL teachers in Iran. *Journal of Teacher Education for Sustainability*, *18*(1), 16-33.

Ghorbani, S., Jafari, S. E. M., & Sharifian, F. (2018). Learning to be: Teachers' competences and practical solutions: A step towards sustainable development. *Journal of Teacher Education for Sustainability*, *20*(1), 20-45.

Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldire.

Graff, R. B., & Karsten, A. M. (2012). Evaluation of a self-instruction package for conducting stimulus preference assessments. *Journal of applied behavior analysis*, *45*(1), 69-82.

Hancock, D. R., & Algozzine, B. (2016). *Doing case study research: A practical guide for beginning researchers*. Teachers College Press.

Hewson, P. W. (1996). *Teaching for conceptual change. In D. F. Treagust, R. Duit, & B. J. Fraser (Eds.), Improving Teaching and learning in science and mathematics*. New York: Teachers College, 131-140.

Hoffmann, A. M. (2006). *The capability approach and educational policies and strategies: Effective life skills education for sustainable development*. Paris: UNESCO.

Korsun, I. (2017). The formation of learnersí motivation to study physics in terms of sustainable development of education in Ukraine. *Journal of Teacher Education for Sustainability*, *19*(1), 117-128.

Kunandar. (2007). *Guru profesional.* Jakarta: PT Radja Grafindo Persada.

Lawale, S. H., & Bory-Adams, A. (2010). The decade of education for sustainable development: Towards four pillars of learning. *Journal of Development*, *53*(4), 547-550. doi: 10.1057/dev.2010.76.

Lincoln, Y. S., & Guba, G. B. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.

Makarevics, V. (2008). Professional competences of future teachers: perspective of different evaluators and contexts. *Journal of Teacher Education for Sustainability*, *10*(1), 68-78.

Marzano, R. T. (2013). *The art and the science of teaching.* UK: Association for Supervision & Curriculum Development.

Meichenbaum, D. (1986). *Metacognitive methods of instruction: Current Status and future prospects. In M. Schwebel & C. A. Maher (Eds.), Facilitating cognitive development: International perspectives, programs, and practices.* New York: The Haworth Press, pp. 23-32.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *European Journal of General Practice*, *24*(1), 9-18.

Mukminin, A., Ali, R. M., & Ashari, M. J. F. (2015). Voices from within: Student teachers' experiences in English academic writing socialization at one Indonesian teacher training program. *The Qualitative Report*, *20*(9), 1394-1407.

Mukminin, A. (2012). *From east to west: A phenomenological study of Indonesian graduate students' experiences on the acculturation process at an American public research university* (Unpublished Doctoral Dissertation). Florida State University, Tallahassee, Florida

OECD. (2011). *Preparing teachers and developing school leaders for 21st century- lessons from around the world (Background Report for the International Summit on the Teaching Profession).*

Orr, M. T., Pecheone, R., Snyder, J. D., Murphy, J., Palanki, A., Beaudin, B., & Buttram, J. L. (2018). Performance assessment for principal licensure: Evidence from content and face validation and bias review. *Journal of Research on Leadership Education*, *13*(2), 109-138.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533-544.

Reid, E., & Horváthová, B. (2016). Teacher training programs for gifted education with focus on sustainability. *Journal of Teacher Education for Sustainability*, *18*(2), 12-30

Ridder, H. G. (2017). The theory contribution of case study research designs. *Business Research, 10*(2), 281-305.

Rohani, A. (2004). *Pengelolaan pengajaran.* Jakarta: Rineka Cipta.

Schmoker, M. (2006). *Results now.* Danvers MA: Clearance Centre, 102.

Schreier, M. (2018). Sampling and generalization. *The SAGE handbook of qualitative data collection*, 84-98.

Sofwan, M., & Habibi, A. (2016). Problematika dunia pendidikan Islam abad 21 dan tantangan pondok pesantren di Jambi. *Jurnal Kependidikan: Penelitian Inovasi Pembelajaran, 46*(2), 271-280.

Spector, J. M., Klein, J. D., Reiser, R. A., Sims, R. C., Grabowski, B. L., & De la Teja, I. (2006). *Competencies and standards for instructional design and educational technology.* Invited discussion paper for It forum. Retrieved October 5, 2008, from http://it.coe.uga.edu/itforum/paper89/ITForumpaper89.pdf.

UNESCO. (2002). *Learning to be: A holistic and integrated approach to values education for human development: Core values and the valuing process for developing innovative practices for values education toward international understanding and a culture of peace.* Bangkok: UNESCO Asia and Pacific Regional Bureau for Education, 2002. 183 p. (UNESCO-APNIEVE Sourcebook, No. 2).

UNESCO. (2008). *Teacher's Guide for Education for Sustainable Development in the Caribbean.* Paris: UNESCO.

Zhu, C., & Wang, D. (2014). Key competencies and characteristics for innovative teaching among secondary school teachers: a mixed-methods research. *Asia Pacific Education Review, 15*(2), 299-311. doi: 10.1007/s12564-014-9329-6.

Biographical notes

MUHAMAD TARIDI works as a lecturer at Universitas Islam Negeri Sulthan Thaha Saifuddin, Jambi, Indonesia. Email: taridi@uinjambi.ac.id

AMRIN DONO works as a lecturer at Universitas Islam Negeri Sulthan Thaha Saifuddin, Jambi, Indonesia.