Teachers' Philosophical Views: Towards a Development of Philosophical Framework in Education

Abel V. Alvarez, Jr., Dan Russell M. Ventura, Bryan Angelo A. Moreno, Reuben Ramiro P. Natividad
Far Eastern University, Philippines

Abstract

Using a qualitative research, specifically phenomenological research design, we explored the experiences and philosophical beliefs of five selected social science college professors in one of the top tier university in the Philippines. They were chosen based on their time and venue availability, convenience, and willingness to participate in sharing their teaching experiences and philosophical views of man. In-depth oral interviews guided with a semi-structured questionnaire were utilized to five participants, and data were analysed using Giorgi and Giorgi's [28] descriptive phenomenological psychological methodology. This method is useful in describing one's experiences being lived through phenomenological psychological analysis of data. Findings revealed commonalities and differences in terms of participants' before and during teaching experiences. Likewise, studies have shown that some participants have shared the same philosophical views of man, unhealthy and healthy individual, its change process, as well as teachers and students' role and learning activities. It was also revealed, however, that some social science college professors described man in different perspectives which were influenced by their experiences and philosophical viewpoints. This paper is geared towards the development of philosophical framework in education which will serve as foundation of understanding whether their experiences and philosophical beliefs impact the way they perceive the role of teachers, students, and what and how they implement learning activities for the purpose of teaching and learning.

1. Introduction

Teachers' pedagogical beliefs are central to their lesson planning and instructional strategies [33], [36], [51], [55], whilst their commitment and emotions have proved to be significant factors shaping their workplace performance [21], [1]. The cognitive and psychological dimensions, in the context of education reforms, can readily manifest their effects, influencing not only how teachers translate policies into classroom practices, but more profoundly, how much their students enjoy and learn from a reformed curriculum.

For many years, there are various debates whether teachers' own lived experiences, including their beliefs and perceptions, influence the way they translate into teaching and learning practice [15], [29], [49]. According to Nespor [39], teachers' beliefs are being organized by their personal experiences, and these experiences are being described by Borg [9] as complex, dynamic, contextualized, and systematic. For instance, their philosophical views may lead in demonstrating change and emergence of new perspectives, such as in the areas of pedagogy [5], [12], teaching practices [7], and learning process [35], [43].

To illustrate, Boyd, Gorham, Justice, and Anderson [10], [4] posit that teachers' prior experiences, such as their exposure in pre-service teaching, has significant effect on how teachers teach. It was revealed that teacher candidates viewed their instructional practices from the standpoint of their experiences and beliefs [45]. These beliefs and experiences contribute with the way they translate into pedagogical practices.

Some scholars described teachers' philosophical beliefs as a cornerstone or framework of one's teaching practices [16], [18]. Educational philosophies are obtained from individual experiences, values, environment, and interaction with others. Thus, teachers' beliefs are shaped by their personal experiences [2] that affect teachers' role, views, and perspectives. For example, the study conducted by Wolff, van den Bogert, Jarodzka, and Boshuizen [57] pointed out that with years of experience, teachers develop better understanding in classroom teaching and management, hence they able to predict classroom management events than their counterparts. Jang and Tsai [31], for instance, reported that more experienced teachers were persuaded to demonstrate higher technology, pedagogical, and content knowledge approach than novice teachers.

The rich constructs and meanings of teacher beliefs paved way in differentiating and

understanding traditional beliefs and constructivist beliefs [50] in today's educational context. Previous studies have shown that teachers' pedagogical beliefs are being influenced between the continuum of teacher-cantered and student-cantered approaches [24]. To exemplify, Deng, Chai, Tsai, and Lee [22] discussed that learner-cantered instructional approach were more likely related with the way teachers perceived his experiences and beliefs in education practices. Results showed that teachers who utilized student-cantered beliefs were inclined in technology integration. Whereas, teachers who are geared to teacher-cantered beliefs were less likely to use technologies. For example, teachers who hold traditional views in teaching science is rooted from their learning experiences and exposure [53].

Interestingly, Tisdell and Taylor [52] claimed the importance of defining teachers' philosophy as it influences teaching and learning environment. The diversity of the learning environment allows teachers to discover and to explore wide array of teaching and learning opportunities. It also makes sense that their beliefs and perceptions make it an essential element in educating, motivating, and making difference in educating their students [3]. Similarly, Hsu, Tsai, Chang, and Liang [30] revealed that age, gender, teaching experience, and teaching levels play integral roles in teachers' instructional beliefs, confidence, commitments and motivations for teaching. This reflects, therefore, that teaching beliefs, perceptions, and experiences impact how teachers approach knowledge and translate these into classroom pedagogical practices [25].

In doing so, we can say that philosophical views, for instance, has something to do with the way they assess, implement, and evaluate the teaching and learning environment. Arguably, Beatty, Leigh, and Dean [8] discussed philosophy as "understanding educational philosophies allows one to consider his or her teaching practice within the larger community of teachers, providing context and perspective. Because teachers enact their own ideas and beliefs about teaching in their daily practice, their differences in philosophical beliefs lead to differences in classroom practice" (p.101). It is significant, therefore, to explore the phenomena in the context of college professors' experiences and philosophical views of man because understanding teachers' philosophies, beliefs, and experiences are indeed serving as foundation and core of instructional practices and educational management which might also contribute to teaching and learning outcomes.

2. Statement of the problem

This paper aims to determine the philosophical views of Social Science Professors which will serve as basis for the development of philosophical framework in education. Thus, this will specifically answer the following questions:

1) What are the experiences of the participants before and during their teaching practices?
2) What is the philosophy of education of the participants in terms of: view of man, unhealthy and healthy person, its change process, teachers' role, learning activities, and students' role?
3) What framework of philosophy in education has been developed?

3. Methodology

The study was conducted in one of the top tier university in the Philippines, particularly located in the so-called university-belt area in the City of Manila. Participants were selected purposively to address the criteria of the participants which include: full-time professors; at least a degree holder of Master of Arts/Science in Social Science related course; currently teaching social science course/program; and willingness to participate in sharing their philosophical view of man and their philosophical framework.

In pursuit to investigate the teaching experiences and beliefs of the teachers, we used phenomenological research design of qualitative research study to explore the experiences of teachers' philosophical views and teaching beliefs. Creswell [20] pointed out that this research approach focuses on the context of participants' lived experiences through the use of open-ended questions towards making sense of these meanings. Giorgi [27] also emphasized phenomenology as way of describing one's experiences being lived through phenomenological psychological analysis of data, such as the case of exploring the lived experiences and philosophical beliefs of five social science college professors in one of the tier university in the Philippines. An in-depth oral interview was used for data collection. We considered the time availability, convenience, and personal demands of the participants. We also utilized technological materials such as voice recorder and/or mobile phone video recorder app to ensure the validity and reliability of the collected data from the inputs of the participants in this study.

A semi-structured interview questionnaire was used for exploring the philosophical views of five selected social science college professors. The instrument is consisted of three open-ended questions, with sub-questions for numbers one and three, focusing on before and during teaching experiences, philosophical views of man, teacher and student's role, and learning activities.

A pilot testing was administered to one social college professor, but not part of our sample size, to check for the accuracy and consistency of the instrument. The question guide was also checked and

validated by the expert in the field, including the English grammar content, before administering to the respondents. Part of our interrater validation procedure was our adviser and someone who is not part of our study to check the reliability of our questions, thus ensuring that administration of interview questions is clearly written. Interviews were audiotaped, transcribed, and saved in a password protected database to ensure confidentiality and privacy of data.

4. Ethical considerations

Prior to data gathering, we secured all the necessary documents which include letter of permission to conduct the study, background of the study, informed consent, and interview questionnaire to ensure that we follow the institutional and ethical guidelines. Then, an informed consent was administered indicating whether they agree or not to participate in the study. Thus, ensuring that the respondents voluntarily participated and that ethical practices are being observed. We also informed and asked for their permission that the interview will be audio recorded for proper and accurate transcription of data. From there, the collated information was stored using password protected account to secure the confidentiality of the interview results.

5. Results and Discussions

The themes that were generated from the participants when asked about their before teaching experiences include: exposure to liberal philosophies, engagement in religious activities, and lack of prior teaching ideas and classroom strategies. For instance, P1 explained that her experiences before entering the teaching profession were primarily a product of her exposure to different views of teaching philosophies. She identified these teachers either as traditional or liberal. As such, P1 considered most of her colleagues as geared towards liberal teachings wherein she was greatly influenced with the concepts of student-cantered learning approach. Overby [42] described student-cantered learning as "bringing the classroom and students to life" (p.109). In fact, P1 pointed out that student-cantered paradigm provides students with opportunities to explore and to understand concepts on their own which also explains Pedersen and Liu's [59]) notion that students assess their own learning goals towards meaningful patterns. P2 and P5 were both engaged with catechism activities, while P4 and P5 were affiliated in seminary teachings. This shows that religious activities, specifically catechism engagement, are viewed through imitation and practice in the concept of humanistic education where there is close association with catechetical teaching [41]. Whereas, P3 defined her prior experiences as confined to someone who prepares lessons, engages

in teaching and learning, and assessment practices. In addition, P3 did not see the importance of student engagement in the learning process.

During entering the teaching profession, P1 and P3 stated that their experiences are the results of their past exposures to different teaching philosophies, such as traditional and liberal teaching styles. Friedrichsen et al. [26] revealed that beginning teachers are guided by their beliefs and attitudes in terms of instructional decision-making; hence they are shaped by their teaching experiences.

Further, P2, P4, and P5 are similar when it comes to "during" teaching experiences. In fact, they expressed their experiences as something related with spiritual involvement. According to them, their exposure to religious teaching practices helped them with their current professional teaching career. For instance, P5 highlighted that his learnings from seminary, like active interaction with children, has contributed in becoming him as a classroom teacher.

In terms of viewing man, P1, P2 and P3 believe man as someone who is good nature. Weiner (2000) posits the Christian belief that God's creation signifies all goodness, as well as moral goodness [40]. P1 also described man who has ways and means of becoming a better person, and has the capacity to create changes. She also argued that man serves as a reflection of the stimulus introduced, and that man creates something good from the stimulus before making response and action. This supports Carl Rogers's psychological perspective where he considered man as an inherently good and creative, and it fulfil one's potential and achieve the highest level of being human [38]. In the same way, P3 stressed man as being naturally good and kind.

P4 viewed man as as "imago dei". Meaning man comes from the image of God. This view is supported by philosophical teachings of St. Augustine where he emphasized that human beings are products of God's image [37]. While, P5 described man as a blank slate. Individual's experiences are filled with an empty mind; hence, these experiences allow knowledge growth. John Locke's philosophical idea emphasized that man is tabula rasa. As such, everything that an individual know comes from experiences. For man to understand various phenomena, he/she must have to experience first [13].

Defining an unhealthy man for P1 is someone who chooses undesirable choices. St. Augustine pointed out that with evil came from man's freedom of choice [13]. With man's capability of freedom of choice, an individual can lead to resisting towards adaptation, participation, and let things happen and become depressive. This contradicts the philosophical notion of Rousseau's freewill of choice wherein "it is the choice that civil man should make to act justly and peacefully toward others in the society which he is a part that troubles him so greatly" [14].

Moreover, P2 explained unhealthy man in the context of someone who contradicts his own natural disposition of being good person. He revealed that an individual will feel something different or wrong when he/she do untoward events to others. This opposes the idea of Kant where he emphasized that the concept of the end does not justify the means. Meaning, man will become unhealthy if he rejects good will in itself. Casanova [14] stressed out Kant's philosophical perspective as "it is not enough to achieve the proposed proper good in the end, because the real moral worth comes from the principle of volition. In order to achieve duty a man must have a good will in itself" (p. 12).

Lack of support system was emphasized by P3 which makes man an unhealthy person. P3 stated that past experiences that were not properly processed, guided, and supported by significant others, like family members or peers, contributed towards contradicting man's goodness. Findings shown that work and family relationships are linked to work and life satisfaction, and that social roles of individuals are related with relationships between work and family [1].

In the same way, P4 viewed an unhealthy individual as someone who separates himself to the environment. Primarily, P4 highlighted the notion of isolation from the society or significant others which results to unpleasant outcomes. This also explains that "social competence affects both support levels and well-being, and others have implicated feelings of personal control, social anxiety, and introversion-extraversion" [19]. P5 also stressed out that man becomes unhealthy if they do not recognize the capabilities of others as well as seeing others as someone who cannot learn. In the same manner, P5 described unhealthy man as an individual who rejects freewill to learn and denies the freedom of others to learn as well.

How does an unhealthy man become a healthy man? P1 believed that self-motivation is essential towards returning to its natural state. She discussed that motivation plays a significant role of man's change process. Ryan and Deci [47] discussed that motivation creates energy, direction, and perseverance, and that it enhances performance and well-being of an individual. On the other hand, P2, P3, and P5 explained the concept of self-realization as an important tool of man's change process. Self-realization highlights the notion of psychological growth and maturation, as well as the realization of self that also includes experiences and awareness of the human being [6]. P2, for instance, considered the idea of reunification of one's inner self to its natural disposition as good and positive being by means of engaging in self-realization. She also emphasized that an individual will remain an unhealthy person because they tend to reject the existence that there is something wrong around him.

P5 discussed the change process of becoming healthy man by pointing out the philosophical views of Socrates as recognizing one's self. He explained that some individuals think they know everything already where in fact they really know nothing. P5 believed that through engaging in self-recognition/realization, an individual will eventually know their own capabilities, skills, interests, etc. Hence, they will realize that they have the capability of knowing and doing various things on their own. Meanwhile, P4 stressed out the concept of atonement as means of turning from unhealthy to healthy individual again. He stated forgiveness to Supreme-being as an integral path towards man's healthy change process. Likewise, P4 recalled the idea of separation from the community which results to not developing one's potentials. However, through atonement, an individual will find him/herself to the community. Hence, there would be greater chance to become whole again.

What makes man a healthy person? P1 and P3 explained their perspective about healthy man as having freedom to make desirable choices. P1 reiterated that through freedom, man makes good choices from variety of options. Rogers [46] described one's freewill as someone possesses openness of experiences, has sense of his own freedom and choices (e.g., Crutchfield, 1958). P1 also shared the notion of becoming a healthy individual by being open to changes and cooperates with the environment. Likewise, P3 claimed that healthy person chooses the people he interacts with, as well as someone who is light-hearted.

For P2 a healthy man is someone who is living according to his/her natural disposition of being good individual. He emphasized the notion of being good to others and not simply being confined to one self. This explains the concept of walk the talk wherein the goodness of an individual must be translated to others towards becoming a healthy man. While P5 revealed the concept of social interaction as part of becoming a healthy man. He argued that man by nature is a culture-being and social animal. The notion of social animal was once coined by Aristotle emphasizing "man is by nature a social animal" [54]. Therefore, a healthy individual grows through the process of social interaction with the environment, and not simply being confined on his own. This was also supported by P4 which emphasized that man's success happens because of social interaction, and that an individual must work once more in the mechanics of the community. It means that personal and community values can only be considered real if those values will make him/her better person.

What are the roles of a teacher? P1, P4 and P5 share the same perspective when it comes to the role of the teacher. To them, teachers are facilitators of the learning environment. As P5 mentioned, teacher as a guide will generate more learning among students

instead of spoon-feeding them what they need to learn. It was backed up by P4 and P1 saying that teachers should give learners leeway to develop for they will always have the potentials. Zhu [58] challenged teachers to be guides or facilitators so that the students will be more motivated to learn, to take more initiative and to cultivate among themselves independent thinking and abilities.

On the other hand, P2 stressed the importance of vanishing the ignorance as the main role of the teacher. If the teacher helps to cease ignorance, then he is becoming instrumental to his natural disposition. The teachers' job according to Laski is to promote intellectual maturity by removing ignorance, imparting knowledge and developing intelligence [4]. Furthermore, in the study of Sadruddin and Hameed-ur-Rehman [48], the respondents shared that the education must envision the system to rekindle and remove ignorance as teacher's knowledge was highlighted to be important. Furthermore, P2 believed that teachers are role models. Wen-Bin Chiou and Chao-Chin [56] pointed out that teachers are role models for students' learning styles and stereotypes.

In the same manner, findings also showed that the learning activities to be implemented based from the respondents view of man includes: student-cantered activities (e.g., problem-based, group activity, case study, dynamics or processing), moral values, self-reflection, knowledge, reason, and freedom, and community engagement or involvement. Learning activities are assumed once the teachers are decided of their roles. P1 who is assuming the role of a teacher as facilitator, student-cantered activities such as problem-based, groupings, case study and games must be promoted so that students will become more independent for their own learning. It will give them the opportunity to learn among themselves, analyse and solve a problem and try to understand concepts on their own. Alper, Fendel, Fraser, and Resek [1] emphasized that student-cantered learning activities encourage development of higher order thinking skills.

Based from the experience of P2, activities that promote the growth of students' moral values are equally important as the participant recalled how the educational system is transpiring away from the teaching of values and virtues and focusing solely on the development of cognitive and psychomotor aspects. Johansson et al. [32] revealed that, since schools have been preparing children for life, they need to be taught with moral values as well so that they become capable and moral citizens of the community.

Both P3 and P5 agreed on using self-reflection to promote realization, knowledge, reason and freedom. This way, students discover truths among themselves. Devi et al. [23] underlined the importance of structured feedback and self-reflection to expand the learning experience of the students. On the other hand,

P4 emphasized the importance of activities that involved learning with community engagements. Activities that will cater the students' social nature will make them understand their roles and responsibilities towards the community. Participation in community activities is vital in developing positive youths. Civic activities are found to have greater academic engagement, enhanced well-being, less involvement in problem behaviours, and they are more likely to value connections to their community than those who are not involved [34].

What are the roles of students? It shows that students should be: active learners, exemplify value of respect, and critical thinker. Respondents described students as active learners. They should be actively involved in the teaching-learning process. Braxton et al. [11] emphasized that educational institutions carry a positive weight (e.g., reappointment, tenure or promotion) in the assessment of the faculty when they use active learning practices. P5 also stressed that students' role is to demonstrate the value of respect to others by being humble and accepting the fact that teachers do not know everything, thus it requires sense of respect to mentors.

P4 and P5 shared their thoughts that learners must also be critical thinkers. Students must know how to ask because asking is part of learning. He or she cannot simply swallow what was given to him or her. Thus, development of critical thinking among students is very important. Chartrand, Ishikawa, and Flanigan [17] found out that critical thinking among other skills, like innovation and information technology knowledge, was identified most important by human resource professionals [44].

6. Conclusion

Philosophical view of an educator plays a very important role in his or her goal of education. To Sözer (2008), one's philosophy of education creates a clear and holistic perspective towards education (e.g., Gas, 2015). It is used by the teachers to adopt and shape their content, teaching-learning methods, classroom environment, assessment and any decisions regarding education. Philosophical framework, therefore, is important to put the view and perspective into a concrete structure.

One's philosophy of education can develop based on his or her values, the locale he or she lived in, his or her knowledge about different philosophies, and his or her experiences. Thus, the participants were asked in the light of concretizing their philosophy of education from their experiences before and during their teaching practices. Their view of man is essential in identifying their philosophy of education. The way they characterize healthy and unhealthy man will make them realize the ideal attitude, behaviour, values and personality a particular student must possess. The change process that will happen in order to transform

unhealthy to healthy man will be the undertaking the teacher and student must undergo in order to reach the goal of education. While the roles of teachers and students and the learning activities described by the participants will make this study phenomenological for their responses will be based on their experiences.

From this, it can be recommended that teachers should have the environment ideal for them to build the concept of education as something that does not start and end with teaching. Likewise, they are regarded as teachers before teaching practices; hence, they must be able to set up their own framework that would make them realize the ultimate goal of education.

7. References

[1] Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support, and work–family conflict with job and life satisfaction. *Journal of applied psychology, 81*(4), 411-420.https://doi.org/ 10.1037/0021-9010.81.4.411

[2] Albion, P. R., & Ertmer, P. A. (2002). Beyond the foundations: The role of vision and belief in teachers' preparation for integration of technology. *TechTrends , 46*(5), 34-38. https://doi.org/10.1007/BF 02818306

[3] Alismail, H. A. (2016). Multicultural Education: Teachers' Perceptions and Preparation. *Journal of Education and Practice*, *7*(11), 139-146. https://doi.or g/ 10.19030/tlc. v2i5.1825

[4] Anderson, J.M. (2012). The skinny on teaching: What you don't learn in graduate school. Information Age Pub. Retrieved from https://books.google.com.ph /books?id= HQEoDwAAQBAJ

[5] Andrews, S. (2003). 'Just like instant noodles:' L2 teachers and their beliefs about grammar pedagogy. *Teachers and Teaching, 9*(4), 351–376. https://doi.org /10.1080/1354060 032000097253

[6] Assagioli, R. (1961). Self-realization and psychological disturbances. New York: Psychosynthe sis Research Foundation.

[7] Basturkmen, H., Loewen, S., & Ellis, R. (2004). Teachers' stated beliefs about incidental focus on form and their classroom practices. *Applied Linguistics, 25*(2), 243–272. https://doi.org/10.1093/a pplin/25.2.243

[8] Beatty, J. E., Leigh, J. S., & Dean, K. L. (2009). Philosophy rediscovered: Exploring the connections between teaching philosophies, educational philosoph ies, and philosophy. *Journal of Management Educati on, 33*(1), 99-114. https://doi.or g/10.1177/10525629 07310557

[9] Borg, S. (2006). Teacher cognition and language education. London: Continuum. https://doi.org/10.11 77/13621688080120030702

[10] Boyd, A., Gorham, J. J., Justice, J. E., & Anderson, J. L. (2013). Examining the apprenticeship of observation with preservice teachers: The practice of blogging to facilitate autobiographical reflection and critique. *Teacher Education Quarterly, 40*(3), 27.

[11] Braxton, J. M., Jones, W. A., Hirschy, A. S., & Hartley III, H. V. (2008). The role of active learning in college student persistence. *New directions for teaching and learning*, *2008*(115), 71-83. https://doi.o rg/10.1002/tl.326

[12] Breen, M.P., Hird, B., Milton, M., Oliver, R., & Thwaite, A. (2001). Making sense of language teaching: Teachers' principles and classroom practice s. *Applied Linguistics,* *22*(4), 470–501. https://doi.org/ 10.1093/applin/22.4.470

[13] Buckingham, W. (2011). The philosophy book. Dorling Kindersley Ltd.

[14] Casanova, J. A. (2014). Rousseau and Kant on Man's Choice: Desire or Reason (Doctoral dissertati on, Saint Mary's College of California).

[15] Chang-Kredl, S., & Kingsley, S. (2014). Identity expectations in early childhood teacher education: Preservice teachers' memories of prior experiences and reasons for entry into the profession. *Teaching and Teacher Education,* *43*, 27–36. https://doi.org/ 10.1016/j.tate.2014.05.005

[16] Charalambous, C., Philippou, G., & Kyriakides, L. (2002). Towards understanding teachers' philosoph ical beliefs about mathematics. Retrieved from https://files.eric.ed.gov/fulltext/ED476093.pdf

[17] Chartrand, J., Ishikawa, H., & Flanigan, S. (2009). Critical thinking means business: Learn to apply and develop the NEW #1 workplace skill. Retrieved from http:// www.talentlens.com/en/downl oads/whitepapers/Pearson _TalentLens_Critical_Thi nking_ Means_Business. Pdf

[18] Cohen, L.M. (1999). Philosophical perspectives in education. Retrieved from https://oregonstate.edu/ instruct/ed416/PP1.html

[19] Cohen, S., & Syme, S. L. (1985). Issues in the study and application of social support. *Social support and health, 3*, 3-22.

[20] Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publications.

[21] Day, C., Elliot, B., & Kington, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching and Teacher Education, 21*(5), 563–577. https://doi.org/10.1016/j.t ate.2005.03.001

[22] Deng, F., Chai, C. S., Tsai, C.-C., & Lee, M.-H. (2014). The relationships among Chinese practicing teachers' epistemic beliefs, pedagogical beliefs and their beliefs about the use of ICT. *Journal of Educational Technology & Society, 17*(2), 245–256.

[23] Devi, V., Mandal, T., Kodidela, S., & Pallath, V. (2012). Integrating students' reflection-in-learning and examination performance as a method for providing

educational feedback. *Journal of Postgraduate Medicine, 58*(4), 270-4. https://doi.org/ 10.4103/ 0022-3859.105447

[24] Ding, A. C. E., Ottenbreit-Leftwich, A., Lu, Y. H., & Glazewski, K. (2019). EFL teachers' pedagogical beliefs and practices with regard to using technology. *Journal of Digital Learning in Teacher Education*, *35*(1), 20-39. https://doi.org/10.1080/2153 2974. 2018.1537816

[25] Fives, H., & Buehl, M. M. (2012). Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us?. *APA educational psychology handbook, 2,* 471-499. https://doi.org/10.1037/13274-019

[26] Friedrichsen, P. J., Abell, S. K., Pareja, E. M., Brown, P. L., Lankford, D. M., & Volkmann, M. J. (2009). Does teaching experience matter? Examining biology teachers' prior knowledge for teaching in an alternative certification program. *Journal of Research in Science Teaching: The Official Journal of the National Association for Research in Science Teaching, 46*(4), 357-383. https://doi.org/10.1002/t ea.20283

[27] Giorgi, A. (2012). The descriptive phenomenolo gical psychological method. *Journal of Phenomenolo gical psychology, 43*(1), 3-12. https://do i.org/10.1163 /15691621 2X632934

[28] Giorgi, A.P., & Giorgi, B.M. (2003). The descriptive phenomenological psychologicalmethod. In P.M. Camic, J.E. Rhodes & Yardley (Eds), *Qualitative Research in Psychology: Expanding Perspectives in Methodology and Design* (pp. 243-273). Washington, D.C.: American Psychological Association.

[29] Hamman, D., Wang, E., & Burley, H. (2013). What I expect and fear next year: Measuring new teachers' possible selves. *Journal of Education for Teaching, 39*(2), 222–234. https://doi.org/10.1080/02 607476.2013.765194

[30] Hsu, C. Y., Tsai, M. J., Chang, Y. H., & Liang, J. C. (2017). Surveying in-service teachers' beliefs about game-based learning and perceptions of technological pedagogical and content knowledge of games. *Journal of Educational Technology & Society*, *20*(1), 134-143.

[31] Jang, S.-J., & Tsai, M.-F. (2012). Exploring the TPACK of Taiwanese elementary mathematics and science teachers with respect to use of interactive whiteboards. *Computers & Education, 59*, 327-338. https://doi.org/10.10 16/j.compedu.2012.02.003

[32] Johansson, E., Brownlee, J., Cobb-Moore, C., Boulton-Lewis, G., Walker, S., & Ailwood, J. (2011). Practices for teaching moral values in the early years: A call for a pedagogy of participation. *Education, Citizenship and Social Justice*, *6*(2), 109-124. https://doi.org/ 10.1177/1746197910397914

[33] Levitt, K. E. (2002). An analysis of elementary teachers' beliefs regarding the teaching and learning of science. *Science education*, *86*(1), 1-22. https://doi. org/10.1002/sce.1042

[34] Ludden, A. B. (2011). Engagement in school and community civic activities among rural adolescents.

Journal of Youth and Adolescence, 40(9), 1254-70. https://doi.org/10.1007/s10964-010-9536-3

[35] MacDonald, M., Badger, R., & White, G. (2001). Changing values: What use are theories of language learning and teaching? *Teaching and Teacher Education, 17*(8), 949–963. https://doi.org/10.1016/S 0742-051X(01)00042-7

[36] Mansour, N. (2009). Science teachers' beliefs and practices: Issues, implications and research agenda. *International Journal of Environmental & Science Education, 4*(1), 25–48

[37] McGowan, R. J. (1987). Augustine's spiritual equality: The allegory of man and woman with regard to imago dei. *Revue d'Etudes Augustiniennes et Patristiques, 33*(2), 255-264. https://doi.org/10.1484/ J.REA.5.104558

[38] McLeod, S. A. (2014). *Carl Rogers.* Retrieved from https://www.simplypsychology.org/carl-rogers. html

[39] Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of curriculum studies, 19*(4), 317-328. https://doi.org/10.1080/00220278701 90403

[40] Niu, W., & Sternberg, R. J. (2006). The philosophical roots of western and eastern conceptions of creativity. *Journal of Theoretical and Philosophical Psychology, 26*(1-2), 18. https://doi.org /10.1037/h0091265

[41] Osmer, R. R. (1997). The case for catechism. *The Christian Century*, *114*, 408-412.

[42] Overby, K. (2011). Student-centered learning. *Essai*, *9*(1), 32.

[43] Peacock, M. (2001). Pre-service ESL teachers' beliefs about second language learning: A longitudinal study. *System, 29*(2), 177–195. https://do i.org/10.1016/S0346-251X (01)00010-0

[44] Ricci, F. A. (2013). Encouraging critical thinking in distance learning: Ensuring challenging intellectual programs. *Distance Learning, 10*(1), 1-15.

[45] Richardson, V. (2003). Preservice teachers' beliefs. *Teacher beliefs and classroom performance: The impact of teacher education*, *6*, 1-22.

[46] Rogers, C. R. (1964). Freedom and commitment. *Humanist*, *24*(2), 37.

[47] Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist, 55*(1), 68. https://doi.org/10.1 037/0003-066X.55.1.68

[48] Sadruddin, M. M., & Hameed-ur-Rehman, M. (2013). Study on the attitude of university teachers and students towards global issues pertaining to human rights: Exploring global perspective through local disposition. *Pakistan Perspectives, 18*(2), 151-171.

[49] Savasci-Acikalin, F. (2009). Teacher beliefs and practice in science education. In *Asia-Pacific Forum on Science Learning & Teaching*, *10*(1).

[50] Shi, Q., Zhang, S., & Lin, E. (2014). Relationships of new teachers' beliefs and instructional practices: Comparisons across four countries. *Action in Teacher Education*, *36*(4), 322-341. https://doi.org/10.1080/016266 20.2014.948228

[51] Thomson, M. M., & Gregory, B. (2013). Elementary teachers' classroom practices and beliefs in relation to US science education reform: Reflections from within. *International Journal of Science Education, 35*(11), 1800–1823.

[52] Tisdell, E. J., & Taylor, E. W. (2000). Adult education philosophy informs practice. *Adult learning, 11*(2), 6-10. https://doi.org/10.1177/104515 959901100203

[53] Tsai, C. (2002). Nested epistemologies: Science teachers' beliefs of teaching, learning and science. *International Journal of Science Education, 24*(8), 771-783.https://doi.org/10.1080/0950069011004913 2

[54] Vinciarelli, A., Pantic, M., Heylen, D., Pelachaud, C., Poggi, I., D'Errico, F., & Schroeder, M. (2012). Bridging the gap between social animal and unsocial machine: A survey of social signal processing. *IEEE Transactions on Affective Computing, 3*(1), 69-87. https://doi.org/10.1109/T-AFFC.2011.27

[55] Waters-Adams, S. (2006). The relationship between understanding of the nature of science and practice: The influence of teachers' beliefs about education, teaching and learning. *International Journal of Science Education, 28*(8), 919–944. https://doi.org/10.1080/09500690500498351

[56] Wen-Bin Chiou, & Chao-Chin, Y. (2006). Teachers' modeling advantage and their modeling effects on college students' learning styles and occupational stereotypes: A case of collaborative teaching in technical courses. *Adolescence, 41*(164), 723-37.

[57] Wolff, C. E., van den Bogert, N., Jarodzka, H., & Boshuizen, H. P. A. (2014). Keeping an eye on learning: Differences between expert and novice teachers' representations of classroom management events. *Journal of Teacher Education, 66*, 68-85. https://doi.org/10.1177/00 2248 7114549810

[58] Zhu, C. (2010). Teacher roles and adoption of educational technology in the Chinese context. *Journal for Educational Research Online, 2*(2), 72-86.

[59] Pedersen, S., & Liu, M., (2002). The Transfer of Problem-Solving Skills from a Problem-Based Learning Environment. Journal of Research on Technology in Education. 35. 303-320. 10.1080/15391523.2002. 10782388.