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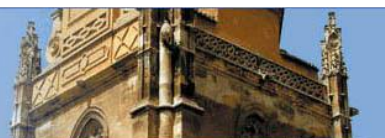
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ABSTRACT:

Reflection in education is usually associated with teachers reviewing their own practices in order to identify problems and find possible solutions to be applied in practice. Following the scoping review design suggested by Arksey and O'Malley (2005), the paper focuses on the existing theses written on reflection in education in the Turkish context as well as the major frameworks employed in the field on reflection in teaching and teacher education. Based on this review, the aim of this paper is to argue that the term "reflection", which is used to represent a deep cognitive and metacognitive process about teaching and learning experiences is misleading and insufficient. Thus, relying on mainly the concepts used by Gestalt psychologists, a new term to be used instead of reflection is proposed: *insighting*. This new term, not only represents the inward look and deep philosophical questioning needed for successful reflection, but it also represents a positive conceptualisation of the act of deep thinking, removing it from being conceptualised as an aspect of "problem solving" alone.

Keywords: Reflection in education, teacher reflection, insight, *insighting*, teacher education

INTRODUCTION

The practice of reflection is not a new one and there are numerous research papers showing the advantages and sometimes the necessity of a reflective teaching practice in education (see McGarr, 2021; Minnot, 2019; Rufinelli, de la Hoz & Álvarez, 2020; Mulryan-Kyne, 2021 for some recent examples). Schön (1983) argues that reflection and reflective practice is one of the most important aspects of good teaching practice. Teachers who reflect on their practice are more aware of their flaws, are able to identify and address problems to avoid/work for solutions for them, and think critically and analytically about their own teaching practices (Fraser, 2019). In this regard, this paper will focus on reflection and reflective (or reflexive) practice in teaching and teacher education from a theoretical perspective, hoping to help our understanding of the reflective practice as more than just looking into the mirror. It aims to disrupt the terminology used in referring to this practice and will suggest a new term to be used instead of "reflection." The aim in this paper is not to redefine reflection or offer another framework for reflection per se but suggest a new perspective in the form of a new term, highlighting the practical problems which arise from the multiple meanings associated with the concept of "reflection." To achieve this aim, in the current paper, I searched for answers to the questions "How can reflection be best defined?" and "Which theoretical framework(s) can this definition best be developed from?"

The Scoping Review Design

Using Arksey and O'Malley's (2005) framework for scoping reviews, the aim of the current paper was identified as reviewing the existing theses within the Turkish context to understand how the terminology for reflection in education is used. Then, as the second step, relevant studies were identified using the National Theses Database of the Turkish Higher Education Council. When searching for the theses in December 2020, two keywords were used: First, the word "reflection" was used to identify the theses which had this word in the title. The theses were not limited by any other factors in the initial search. This yielded in 1035 theses, which were then filtered to show only those that were written in the field of education. This amounted to 825 theses. The search was conducted in English since all of the theses titles are submitted in both Turkish and in English to the database. In the third step of the analysis, as suggested by Arksey and O'Malley (2005), the list of the theses was tabulated to separate MA theses from PhD theses. Finally, the titles of the theses were reviewed qualitatively to see how the word "reflection" was used in specific studies. For this step, in some cases where the references to reflection was not clear in the title, the abstracts of the theses were reviewed using content analysis methods (Mayring, 2000).

In addition to the Turkish theses database, to identify the popular frameworks used in the field in relation to reflection or reflective practices, another search was carried out using EBSCO academic databases. The aim in

using this database was to make sure that the review not only included the studies published in specific scientific indexes but also involved articles and books in other contexts. A similar methodology for the scoping review was followed in this phase too. The initial search using the term “teacher reflection framework” resulted in 122 results. When this search was filtered to include only the publications between 2000 and 2022, i.e. the last 20 years, then the results indicated 116 sources. These sources included scientific articles published in periodicals, books, review articles, dissertations, electronic sources and reports. The distribution of these can be seen in Table 1 below:

Table 1:Results of the Index Search for “Teacher Reflection Framework” (2000 – 2022)

Type of Sources	Number of Sources
Academic Journals	100
Reports	44
Electronic Resources	5
Books	3
Dissertations	3
Reviews	2

When the same search was repeated using “teachers reflective teaching” as keywords, 837 sources were indicated. Filtered to the last 22 years, the search revealed 664 sources, which again included scientific journal articles, books, dissertations as well as conference presentations (see Table 2).

A content analysis of the titles of the articles in these two searches showed that an overwhelming majority of the publications were related to language teaching practices or language teacher education. More specifically, English language teaching and teacher education dominated the field.

Table 2:Results of the Index Search for “Teachers Reflective Teaching” (2000 – 2022)

Type of Sources	Number of Sources
Academic Journals	547
Reports	236
Dissertations	23
Magazines	16
Books	9
Electronic Resources	5
Reviews	4

A further analysis of the content of the sources which emerged from the two searches on the given database with regard to the frameworks used showed that there were two main frameworks which appeared in these sources. The first one of these was Shön’s (1983) seminal work on reflective practice. It was not surprising to see that an overwhelming majority of the publications included this framework as their starting point since it is one of the most cited works in the field of education in general and in teacher education in particular. The second framework, which was used in the reviewed literature was Chitpin, Simon and Galipeau’s (2008) model for reflection in professional development. This second framework was not only employed by studies in education but in other fields too to guide inquiries into professional practices. Although there were many other frameworks suggested in several articles, these two appeared to be the most widely referred to. Therefore, the main arguments in this paper will revolve around these two frameworks.

Findings and Discussion

Reflection as a Term in Education

Reflection as a term appears to be used very widely in various fields and in various scientific studies. The scoping review I carried out on the Theses Database of the Turkish Higher Education Council’s website revealed that there are 545 MA and 280 PhD theses that include “Reflection” in their title. However, only 17 of these are actually related to the deep, cognitive, belief-changing practice that the term “reflection” means. Many of the others with “reflection” in their title focus on the mirroring or the impact of materials on practice, or theory on practice, or practice on students. So, more often than not, they are referring to the impact of something on something else when they use the term. Especially in the studies conducted in Turkish, the problem is even greater because the word “yansıtma” or “yansıtma” which also means reflection in the mirror or reflection of light, indicates no change in what is being reflected. It is a transfer or transmission of the thing that is being reflected through the person, with no change in the person doing the reflection. This, however, is not the kind of reflection that is implied in education by the term. Reflection in this sense is shallow, involving almost no thinking. It is merely parroting of information. It is, in fact, the opposite of what we want to achieve through

reflective learning and teaching, which can cause misinterpretation of the whole process (Pareeka, Sharmab, Nainawatc & Meena, 2022).

The confusion grows when we look at the issue in different geographical and cultural contexts. While reflection in the Turkish context sounds like a shallow practice, in the northern American context, the term “critical reflection” is used to refer to reflective practices that stress the commitment by teachers to justice and ethics of care. More specifically, within the framework of critical pedagogy, critical reflection refers to the meaning making process of one’s cultural and racial identities and growing an understanding of how this impacts their practice. This is different from the critical reflection on teaching practice that we refer to in our context, and possibly how it is used in some other contexts too. In our context, critical reflection is the process through which in-service or pre-service teachers think about and critically analyse what worked and what did not work with respect to their teaching practices. Some authors suggest “deep thinking” as a term to be used instead of reflection to remove such confusions but this term also does not indicate the critical thinking, self-questioning nature of the process either. The term we choose to use here should refer to and indicate the process through which we turn tacit into explicit (Loughran, 2002).

Thus, the question of “what does reflection mean?” remains. Loughran (2002) warns that reflection can be on a very surface level if we do not take it seriously and pay attention consciously. He suggests that the practitioners may fall into the trap of rationalisation instead of reflection. Rationalisation means is providing reasons for behaviours, similar to the way one would utilise Freudian defence mechanisms in order to save one’s face from embarrassment or even failure. Even though rationalisation is a process where reasoning is involved, there is no intention of change. The intention in rationalisation is to cover up a mistake with some logical reasoning. Loughran (2002) also argues that experiencing something does not necessarily mean that learning actually takes place. In other words, just because we send our students to schools to observe in-service teachers while teaching or just because we give them 10 hours to teach in a semester in a real classroom does not actually mean that it will result in them learning how to be an effective teacher. For learning to be internalised, reflecting on the process is essential.

Reflection and Frameworks for Reflective Practice

Shön’s (1983) earlier work showing the importance of the link between reflection and practice was the basis for many teacher educators in adopting a reflective practice approach. Before Shön published his work on reflective teaching practice, reflection was actually proposed as an integral part of any learning process by Dewey in 1930s. In this regard, reflection is defined as “an active cognitive process, which leads to the critical analysis of the beliefs and knowledge so as to address problems” (Dewey, as cited in Yakışık, 2015, p. 617). To link this to practice, Shön (1983) defined reflective practice as ‘a deliberate inquiry’ to be used when faced with problems/troubling situations, which would involve evaluating actions and modifying them as and when necessary to solve the problems observed in practice. In other words, it is part of the problem solving agenda. Although as a starting point, this definition and its focus on the relationship between the act being deliberate, the problem being defined and goal being determined towards a result was spot on, it is no longer comprehensive enough to include all the means through which we reflected on practice. Reflection involves more than just a deliberate inquiry. Moreover, we do not reflect on problems only.

Teacher Reflection and Relevant Frameworks

In the literature related to the reflective practices of both in-service and pre-service teachers, there are several studies where frameworks for guiding reflection are suggested. As the review in this study revealed, the second most cited of these frameworks is Chitpin, Simon and Galipeau’s (2008), who base their suggestion on Karl Popper’s work on the reflective deduction model of professional development (Figure 1). They argue that this model helps us move one step further than Dewey (1933) and Vygotsky (1978) in placing reflection within the overall learning process. They also claim that the model is more goal oriented.

$$P1 \Rightarrow TT1 \Rightarrow EE1 \Rightarrow P2$$

Figure 1. Chitpin, Simon and Galipeau’s (2008) Model for Reflection

In this model, P1 is the problem as it is initially defined, TT1 is the tentative theory regarding a solution for this problem, and EE1 is the error eliminating process. In other words, it is the trial and error or actual practice where the possible solutions are tried out in the relevant context of the problem. P2 is the restatement of the problem, hopefully in the form of a solution. Although this model may help us move further in our reflective practices, I believe it is too structured to allow for problems and solutions to be linked together. Problems may arise from multiple cases and relevance between cases may be multimodal. In this respect, although a structured approach appears safe, it may not be useful in addressing complex issues for reflection.

As mentioned before, several similar frameworks are available in the literature, some less structured and a majority of them focused on teacher education rather than in-service teachers themselves. Yet, almost all are proposing some specific, and usually linear steps to follow. Chitpin, Simon and Galipeau's model particularly raises a significant question in this respect: Is reflection always a linear process? And can we always consider reflection as a problem-solving process? Isn't it also a way of changing our belief systems? Dewey mentions beliefs in his definition of learning, but his focus is still on the analysis of beliefs as part of the problem, not as a part of the solution.

In a similar vein, Howard (2003) defines reflection in relation to pre-service teachers as "attention paid to one's experiences and behaviours and meanings made and interpreted from them to inform future decision-making" (p. 197). He refers to Dewey again, calling reflection as part of the learning process a "special form of problem solving steeped in scaffolding of experiences and events that should be viewed as an active and deliberate cognitive process" (p. 197). Similar questions I posed for Chitpin and his colleagues would emerge here. Reflection is only geared towards problem-solving. What about recognition and appreciation of positive practice? Within this framework, we seem to ignore the ability to recognise what worked and focus on what did not work. However, reflection in/on teaching should also focus on positive practice for it to be recognised and to become part of methodology.

Problems with the Existing Terminology and a New Proposal

In search for an applicable framework that would be comprehensive enough to represent all the relevant aspects of what we do when we "reflect," it emerged that there is a problem with the terminology used as well. Thus, we need another term instead of "reflection" in the field of teacher education and teaching. While questioning earlier frameworks of reflection and their comprehensiveness as well as their accuracy, Yuan and Lee's (2014) study stood out as a different inquiry, where they describe reflection as a process of belief change. They call it a transformational process where metacognition is involved at a deeper level than probably any other thinking process. This involves anything to do with beliefs about one's self and one's teaching. This is quite a good definition of what we mean by reflection in/on teaching and education. While we talk about such a deep process, the terminology still signals refers to the self in the mirror, which is misleading at the least and plain wrong at the most. In this article, I propose that we replace the word reflection with the term "insight" ("içgörüş" in Turkish) and use it in the verb form "insighting" to refer to the process of seeing and understanding the inner nature of things, sometimes through intuition, sometimes through deep and critical thinking, and sometimes through problem solving. Insight is not a new term, especially in psychology, but, for a number of reasons, it fits well with what we are doing as teachers and teacher educators.

In psychology, Gestalt theory explains that insight is a very important element of one's understanding of the self and the self's place in the world. As you probably already know, Gestalt theory suggests, in very simple words, that we understand the chaotic nature of the world and our place in it by reorganising our perceptions on the principle of "the whole is something else than the sum of its parts" as proposed by Kurt Koffka (1935, p. 176). Following on from Aristotle, Gestalt theorists believe that the whole process of perception and organisation of the perceptions is a cognitive one that involves complex interactions of various stimuli. In this theory, insight plays an important part in helping people recognise and understand their perceptions and tendencies towards formation of these perceptions. Understanding of perceptions also involves a process of awareness of one's beliefs as well as behaviours. The next step is accepting one's self as a whole with all the different and sometimes conflicting parts. This awareness is the first step of change. Once we gain insights into our beliefs, behaviours and reasons behind those behaviours, we can work on changing those beliefs, perceptions and eventually our behaviours. Thus, insighting involves a deep and clear understanding of our mental attitudes and behaviours. This is what we are trying to do when we "reflect" during our practice of teaching and teacher education. We are trying to educate "insightful" teachers – teachers who can look deeply into themselves and their understanding of teaching, as well as their everyday teaching practice. They should be able to appreciate good practice first, and then identify problematic issues and try to change these through critical thinking, intuition and whatever other means they can utilise. Through insighting and insightful practice, we bring in not only cognitive processes but also emotions, beliefs and attitudes to the fore. In many cases, I found that my students, teacher candidates, would focus on one aspect of their teaching practice in their reflective essays. They would find it difficult to see the lesson as a whole and understand how each element would contribute to the whole of the lesson. Thus, while deep thinking or reflecting on one aspect, they would ignore the others, which could equally be relevant to the way their lesson was conducted. If we can teach them to be insightful through insighting, using the Gestalt theory as a basis, may be they will be able to bring different parts together to understand the whole. For instance, they will be able to understand that classroom management is not only about reinforcement and punishment or control of unwanted behaviours but in a specific classroom, can be about the seating arrangement as well as the teacher's instructions.

Such an understanding will help teacher candidates recognise how their perception of their class as a whole may be contributing to the planning of their lessons. As teachers, we are expected to juggle with a lot of aspects of

the classroom – the planning of the lesson, preparation of the materials, matching the standards set by our institutions and also matching the various levels, learning styles and intelligences our students. Unless we gain a deep and clear understanding – *an insight* – into how each classroom and its various dynamics work, just like Gestalt, we are not going to be able to juggle at all.

The Complex Nature of Experience and Insighting

Larrivee (2000) was one of the few authors who highlighted the connected nature of experience in the process of reflection. She suggests that reflection helps teachers to develop their own solutions to problems by situating them in the context we teach in, and linking them to our assumptions, beliefs, attitudes and experiences about our teaching and our classrooms. Larrivee says “self-reflection goes beyond critical inquiry by adding to conscious consideration the dimensions of deep examination of personal values and beliefs, embodied in the assumptions teachers make and the expectations they have for students” (p. 294). Although she suggests this process as necessary to develop a sense of self-efficacy, her focus is still on the solution of problems. Instead, insighting or gaining insights provides us with not only an understanding of our conceptual frameworks and to identify problems with them but also recognise the strength in these in relation to specific educational contexts. If we apply insighting to teaching and teacher education, everything we are doing in the name of ‘reflection’ makes a clearer sense. Even when we consider Shön’s (1983) categorisation of reflection-in-action, reflection-on-action, and reflection-for-action, insighting works well in all types of reflection, furthering our focus not only on action but on other aspects of practice. The term also works with the steps that Larrivee (2000) suggests to become critical self-reflective practitioners: solitary reflection, perpetual problem solving and questioning the status quo. These processes are necessary according to Larrivee to start the process of reflection, allow a way for developing the practice by accepting uncertainty, recognising contextual relationships and considering various plausible solutions or explanations for events and circumstances. All of these concepts that Larrivee deems important in becoming critical, self-reflective practitioners are involved in insighting. However, Larrivee also puts emphasis on the consideration and understanding of negative experiences, thoughts and beliefs, as well as contextual links between these negative concepts. She claims that any effort in this regard helps to negotiate feelings of frustration, insecurity and rejection. While the way she situates the experience and reflective practice in context is admirable, one question still remains: “can it not also help appreciate feelings of accomplishment, positive learning and self-efficacy?” Insighting has this positive resonance where positive, negative and other confusing or complex feelings, thoughts, beliefs, assumptions, experiences and expectations can be clarified in relation to practice. Insighting can help come up with new skills and develop a sense of self-efficacy. These suggestions shift our focus on reflection being a cognitive problem-solving process to development of the self and probably reaching the Zone of Proximal Development as Vygotsky calls it. It is a process that one can assist themselves in advancing their skills as well as beliefs, attitudes and behaviours.

Although Larrivee (2000) suggests critical self-reflection as a transformational process for teaching practice of individual teachers, I agree with Jay and Johnson (2002) that it can also be collaborative. They point out that: ‘Reflection is a process both individual and collaborative involving experience and uncertainty. It is comprised of identifying questions and key elements that have emerged as significant, then taking one’s thoughts into dialogue with oneself and with others. It involves searching for additional perspectives, an understanding of values, experiences and beliefs, and also the larger context within which the questions are raised.’ (p. 75).

Jay and Johnson (2002) also highlight that through reflection one reaches newfound clarity related to changes in action or disposition. New questions naturally arise, and the process spirals onward. This explanation is part of what I call insighting, especially in the sense that it is not a linear process but a spiral, continuous and collaborative one.

The Need for an Applied Linguistics Perspective: Reflective Acts

The current analysis revealed that all these studies reported findings based on the analysis of reflections from a behavioural and learning-focused perspective. It also shows how our understanding of these practices is largely informed by the definitions used in the relevant frameworks. Yet, none of the existing frameworks actually include a linguistic perspective, where the language used during the process of reflection is analysed. While there is ample reference to the steps to be followed or the processes to be involved, the only tangible aspect of the reflective practice, i.e. language, is ignored in all of the previously presented frameworks. Thus, it is necessary to consider the way we conceptualise these terminologies from an applied linguistics perspective to allow for a deeper analysis of how language is utilised to represent insights and the process of insighting itself. In this regard, Kurt (2018) argues that reflection needs to be a conscious process that can be observed and analysed linguistically too. He puts forth the idea that if those who are reflecting on their practices and experiences are aware of what he calls “Reflective Acts,” then the process of reflection can be nurtured and more quality reflection can be achieved. He further argues that an awareness of these acts can help “systematise, coordinate and better manage individuals’ reflections” (p. 258). By carrying out a meta-analysis of selected studies on student reflection, he proposes the teaching of 17 reflective acts under 4 different categories. These

categories are: a) interpretive reflective acts; b) associative reflective acts; c) transformative reflective acts; and d) affective reflective acts.

Although Kurt's (2018) study is specifically focused on learner reflection to improve learning, it can easily be applied in many different fields and settings where learning and learner reflection is involved, including teacher education. Whether the categories he proposes are exhaustive of each other or not and whether these will actually help to improve the quality of reflective practices when they are taught explicitly during the learning process needs to be further researched. However, I believe that the strength of Kurt's classification comes from the fact that it is grounded in data. It has emerged from actual reflective essays of students who have been through a specific and controlled process of learning. Thus, it is useful in opening up the discussion on what we should expect to find in reflective essays of our students. These reflective acts also resonate with what I mean by "insighting" – they can be considered as ways of insighting or from a linguistic perspective, linguistic performances of insighting. In other words, this framework allows us to tangibly see students' insights and insighting processes, and hence work on these to improve them. Kurt's categorisation will help us in organising our expectations of teachers and teacher candidates and when these expectations are juxtaposed against other theoretical frameworks, a more practical and realistic framework will emerge for us, the teacher educators.

Conclusions and Implications

Despite such good recommendations to improve practice, previous research suggests that reflection is still missing in our teacher training programmes. In a study published in 2010, Odeh, Kurt and Atamtürk report that in the context of the universities in northern Cyprus, reflective teaching is not prioritised in teacher education programmes. Yakışık (2015) also reports that although The Turkish Higher Education Council has clear guidelines on how the cooperation between faculties, schools and departments should work, it does not provide any suggestions on how the relationships among pre-service teachers and their supervisors should be organised. This is a significant issue when the influence of the Council's on teacher training programmes is concerned, especially since the 4-year teacher education programmes were given the freedom that they enjoy now in 2021. Yakışık (2015) further cites Gönen and Erginel, who both argued that reflective practices are missing from pre-service education programmes.

Moreover, our recent review by the Association for the Inspection and Accreditation of Education Programmes (EPDAD), revealed that they did not have any focus on whether reflection was part of our practice or not. They were concerned about the feedback we provided to the students but no questions were asked to pre-service teachers about how they reflected on their learning as a process or as a programme on the whole. There were no questions about whether they were encouraged to reflect and change their teaching practices through critical thinking or collaborative reflection. They were, however, quite concerned that the students would have enough opportunities of teaching practice in schools. Yet, as Loughran (2002) points out, and I strongly agree, experience alone does not lead to learning. We need deep thinking, insighting, for learning and change to happen. If such a practice becomes one of the core components of teacher education in our context, then this will not only improve the quality of learning by teacher candidates but it will also (a) promote autonomous learning on their part, (b) become part of their teaching practice when they become in-service teachers, and (c) positively impact the teaching-learning experiences of students in schools by improving the teaching quality.

REFERENCES

1. Arksey, H. & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19-32. doi: <https://doi.org/10.1080/1364557032000119616>
2. Chitpin, S., Simon, M. & Galipeau, J. (2008). Pre-service teachers' use of the objective knowledge framework for reflection during practicum. *Teaching and Teacher Education*, 24, 2049-2058. doi:10.1016/j.tate.2008.04.001
3. Dewey, J.(1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Chicago: Henry Regnery.
4. Jay, J. K., & Johnson, K. L. (2002). Capturing complexity: A typology of reflective practice for teacher education. *Teaching and Teacher Education*, 18(1), 73-85. doi: [https://doi.org/10.1016/S0742-051X\(01\)00051-8](https://doi.org/10.1016/S0742-051X(01)00051-8)
5. Fraser, S. (2019). Understanding innovative teaching practice in higher education: a framework for reflection. *Higher Education Research & Development*, 38(7), 1371-1385. doi: 10.1080/07294360.2019.1654439
6. Howard, T. C. (2003). Culturally relevant pedagogy: Ingredients for critical teacher reflection. *Theory into Practice*, 42(3), 195-202. doi: 10.1207/s15430421tip4203_5
7. Koffka, K. (1935). *Principles of Gestalt psychology*. New York, NY: Psychology Press.

8. Kurt, M. (2018). Quality in reflective thinking: Elicitation and classification of reflective acts. *Quality & Quantity*, 52, 247-259. doi: <https://doi.org/10.1007/s11135-017-0609-1>
9. Larrivee, B. (2000). Transforming teaching practice: Becoming the critically reflective teacher. *Reflective Practice: International and Multidisciplinary Practices*, 1(3), 293-307. doi: 10.1080/713693162
10. Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education*, 53, 33-43. doi: 10.1177/0022487102053001004
11. Mayring, P. (2000). Qualitative content analysis. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 1(20), 28 paragraphs. doi: <http://nbn-resolving.de/urn:nbn:de:0114-fqs0002204>
12. McGarr, O. (2021). The use of virtual simulations in teacher education to develop pre-service teachers' behaviour and classroom management skills: implications for reflective practice. *Journal of Education for Teaching*, 47(2), 274-286. doi: 10.1080/02607476.2020.1733398.
13. Minnot, M. (2019). Reflective teaching, inclusive teaching and the teacher's tasks in the inclusive classroom: A literary investigation. *British Journal of Special Education*, 46(2), 226-238. doi: 10.1111/1467-8578.12260
14. Mulryan-Kyne, C. (2021). Supporting reflection and reflective practice in an initial teacher education programme: An exploratory study. *European Journal of Teacher Education*, 44(4), 502-519. doi: 10.1080/02619768.2020.179394
15. Odeh, Z., Kurt, M., & Atamtürk, N. (2010). Reflective practice and its role in stimulating personal and professional growth. *International Scientific Seminars and published in Proceedings (Vol. 10, p. 2013)*. Retrieved December 12, 2021 from www.quo.edu/english/conferences/firstNationalConference/pdfFiles/zaidOdeh.pdf
16. Pareeka, R. B., Sharmab, R. K., Nainawac, A. K., Meena, O. P. (2022). Prospective chemistry teachers' experiences of learning difficulties at the undergraduate course. *International Journal of Education, Technology and Science (IJETS)*, 2(1), 047-057.
17. Rafinelli, A., de la Hoz, S. & Álvarez, C. (2020). Practicum tutorials in initial teacher training: Conditions, strategies, and effects of reflective practice. *Reflective Practice: International and Multidisciplinary Perspectives*, 21(1), 54-67. doi: 10.1080/14623943.2019.1708712
18. Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. NY, Basic Books.
19. Yakışık, B. Y. (2015). The effect of reflective practice on 'field experience' in pre-service teacher education. *EKEV Akademi Dergisi*, 19(62), 617-628.
20. Yuan, R. & Lee, I. (2014). Pre-service teachers' changing beliefs in the teaching practicum: Three cases in an EFL context. *System*, 44, 1-12. doi: <https://doi.org/10.1016/j.system.2014.02.002>
21. Vygotsky, (L). (1978). *The mind in society: The development of higher psychological processes*. The President and Fellows of the Harvard College.