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Research Article

Views of Prospective Teachers About Reflective Journals on Teacher Education

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Abstract

Reflective thinking skill helps prospective teachers to learn "thinking and acting like a teacher" with different ways and therefore has an important role on teacher education. The aim of this study is to determine the views of prospective teachers on their reflective journals in "Teaching Practice" course. Study group consisted of twenty prospective teachers who were enrolled in Teaching Practice course in Hacettepe University, Department of Computer Education and Instructional Technology at 2013-2014 Spring semester. Data were collected with an open ended questionnaire which had six items in this case study. Besides, in order to see the long-term impact of reflective journals on their professional life, researchers carried out an interview with three of prospective teachers who worked as ICT teachers on the following year. Interview data were analyzed with content analysis method and examined under themes that matched with the research questions. Prospective teachers underlined that they have evaluated themselves as a holistic way, watched their own development, gained a critical perspective, expressed their sense of responsibility and developed their writing skills

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with the help of journals. Results also showed that they gained new experiences through others' blogs. Moreover, interview results showed that reflective journals contributed their personal and professional development.

Introduction

Currently, many disciplines create learning environments associated with real life and/or professional life to prepare individuals for the future, the society they live in and the business world. The students are expected to reflect theoretical knowledge onto practice, thus their skill of reflective thinking comes into prominence. The reflective thinking is one of the basic skills at being successful in case of complicated or unpredictable circumstances. Dewey's (1933) approach to learning by practicing and experience constitute theoretical foundations of reflective thinking. Dewey's view that "Learning is reflection on experience" is important to understand the effect of reflection on the learning. Dewey (1933) defines the reflective thinking as effectively, constantly and carefully thinking any knowledge. Schön (1983) was influenced by Dewey's view on reflective thinking and suggested that individuals reshape their act in line with the data that they obtain by continuous reflective thinking on their act. Taggart and Wilson (1998) define the reflective thinking as logical decision-making process based on knowledge including assessment of consequences in regard to education-related matters. Atay (2003) defines the reflective thinking as the process of recalling, thinking over and assessing any experience by usually considering a certain objective; and Lee (2005) defines the reflective thinking as a gradual process including one's recalling their experience according to circumstance, one's establishing relationship between their experience (making reasonable), and using experience for personal change and development (reflection).

The reflective thinking is important for development of anybody that is specialized in a specific field. This is because reflective thinking skills involve a sort of self-assessment skill that requires to identify weaknesses and strengths in the process of thinking and learning and to make plans to improve them in addition to individual's awareness for thinking and learning process. Furthermore, the students of the 21st century are expected to have skills such as problem solving, researching, questioning, thinking, and being aware of what and how to learn. Such requirements bring the importance of reflective thinking forward. Upskilling students with reflective thinking will allow them to think, question and make decisions (Duban and Yanpar Yelken, 2010). To upskill students with such skills, it is obvious that it is necessary to arrange learning environments accordingly, and for teachers to have reflective thinking skills, who will help students gain such skills.

The concept of reflective thinking constitutes the foundation of many studies and has been addressed as a critical issue for educating teachers (Bataineh, El Karasneh, & Barakat, 2007; Köksal and Demirel, 2008; Duban and Yanpar Yelken, 2010; Gedik, Akhan, & Kılıçoğlu, 2014). Collin and Karsenti (2011) indicated that reflective practice that allows expressing experience is one of compulsory skills that need to be included in education of teachers. No doubt that reflective thinking has an important place in educating preservice teachers. As stated by Jay and Johnson (2002), the teachers should be taught "to think as a teacher" through many methods prior to service for teachers to reflect it. Having reflective thinking skills by preservice teachers and improving such skills mean that such skills are directly transferred to the learning environment in their professional life, and that students also gain these skills.

A variety of activities may be used to upskill preservice teachers with reflective thinking skills. The examples of activities may include keeping a journal or a blog, videotaping and portfolios. As seen in the literature, one of the widely used instruments to gain reflective thinking skills is the reflective journal (Ekiz, 2006; Anılan and Anagün, 2007; Işıkoğlu, 2007; Lee, 2008; Tok, 2008; Koç and Yıldız, 2012). A journal helps preservice teachers to ask questions on the learning process, to develop a hypothesis (Lee, 2008), to overthink on the problems that they face in the class (Ekiz, 2006), and to express oneself as a teacher. As pointed out by Ersözlü and Kazu (2011), a reflective journal is a record book in which preservice teachers write what they know or what they do not know, the level of their understanding, weaknesses and strengths that they have, what kind of knowledge that they have for their own learning, the strategies that they use, their objective and the level of achieving their objective, and what their feeling and thought on any matter or situation.

Blogs are used to upskill preservice teachers with reflective thinking skills (Xie, Ke, & Sharma, 2008; Lai and Land, 2009; Yang, 2009; Bayrak and Koçak Usluel, 2011). A blog is a journal-like material where people write what they want to write (e.g., text, video, and image) and whenever they want to write without having a high level of technical knowledge, and is very easy to use. Blogs have drawn attention in a short time in the field of education (Richardson, 2006) and been regarded as an appropriate tool for students at various stages of education as they provide flexibility in many aspects, do not require technical knowledge, and their content can be individualized (Usluel and Mazman, 2009).

Blogs relieve the learning process from limitations of time and place and allow continuous learning in any environment that can be accessed on the internet. In this sense, blogs support the learning activities outside the class. The relevant studies suggest that students assume the responsibility of learning when they use blogs, they express their thoughts more freely, they are able to express themselves better in the blogs, they actively interact with followers through comments on their writing and improve their learning skills in time (Meredith, 2010; Kang, Bonk, & Kim, 2011; Yeo and Lee, 2014; Jacklinga, Natolia, Siddiquea, & Sciullia, 2014). In addition, the students may improve their reflective thinking skills by keeping a journal where they reflect their own thought, activity and role regarding anything that they learn in the classroom or a discussion that they participate. Each student can be encouraged to implement the reflective thinking process by evaluating their own development processes about the activity in their own blog. The students get new information by actively participating in the learning environment and using their experience. So, it is ensured to use what they have learnt in new conditions. Such new knowledge is shared by interaction in later processes, and the reflective thinking skills begin to improve when involved in new interactions. With reflective thinking, one of the high-level thinking skills, the students have skills to learn by comprehending rather than memorizing, to use knowledge, and to solve problems that they face.

The education of teachers and preservice teachers is very important in preparing learning environments where students can gain reflective thinking skills. A teacher that has reflective thinking shills is able to identify problems that may occur in the learning – teaching process and to produce solutions for overcoming such problems (Shoffner, 2006). If the learning environments that are arranged for education of preservice teachers are organized to gain reflective thinking skills, this will lead them to arrange such learning environments when they become a teacher. Keeping a journal, video records, student development file and reflective journal are the widely used materials to gain reflective thinking skills. Especially, the reflective journal helps students to see their own improvement through monitoring and documenting improvement in learning as well as ensures improving thinking skills and active involvement in the process. The preservice teachers can gain skills by using theoretical information that they learn through reflective thinking in practice. Particularly, arranging learning environments to gain reflective thinking skills and developing activities in the Teaching Practice class will help preservice teachers use their knowledge and skill during practicing and solve the problems that they may have as well as contribute to professional

qualification of preservice teachers. In this context, objective of this research was to identify preservice teachers' view on reflective journal activities performed in the Teaching Practice class so that it can be possible to develop recommendations for organizing reflective journal activities more efficiently in education of teachers.

Method

Design

The case study, a qualitative research method, was used in the present research. A case study is defined as researching a fact where boundaries of context and fact are not precisely definite in the context of real life (Yin, 2003), and described as a research method that requires careful design of each stage, being based on firm justification, and technical research knowledge (Yıldırım and Şimşek, 2006). The case addressed in this research was to use reflective diaries in education of teachers. In this research, view of 20 preservice teachers on reflective diary was obtained, who studied in Department of Computer and Instructional Technologies, Hacettepe University in the Spring Term of 2013-2014 Academic Year, were enrolled in Teaching Practice class, and voluntarily participated in the research. The data was recollected after 1 year from three preservice teachers who were assigned as teacher of Information Technology among preservice teachers participated in the research in order to obtain their view on the effect of such practice on the professional life of preservice teachers. These three preservice teachers were identified considering assignment and accessibility factors and interviewed through an online chat.

Data Collection Tools

Data were collected by a structured form that was developed by researchers and revised in line with the view of two domain experts to give it a final form. The form includes six open-ended questions. These questions were intended to identify positive and negative aspects of blogs, contribution to professional and personal development, and positive and negative aspects of blogs being open to sharing. At the next stage, the data was collected online by semi-structured interview questions asked to 3 teachers who took place in this practice and were subsequently assigned. The semi-structured interview form used for interview of

teachers includes questions for contribution of blogs, whether it is used for classes, maintaining to write a blog, and whether previously written blogs were referenced.

Research Process

The preservice teachers were provided with four different themes during the class. The themes were published on the webpage of the class, and preservice teachers were asked to write their own blog for the theme provided and specify the link address under the theme as comment. The preservice teachers opened their blog to sharing and allowed to receive comments. So, all of the students were able to read comments of other students and make a comment.

The preservice teachers wrote the answers of the following questions on the blog during the term:

- How should a good teacher be?
- Please specify the support you have received during the class of Teaching Practice (for faculty and practice school).
- What are the difficulties you have encountered during the class of Teaching Practice?
- What have you learnt in the class of Teaching Practice? (e.g., communication, classroom management, time management, assessment and professional development)

In the end of the term, the printed form was distributed to preservice teachers and they were asked to complete it.

Analysis of Data

The content analysis method was used to analyze data, and the data was reviewed under the theme matching with open-ended questions. To ensure reliability of the research, the forms including view of students were shared by two researchers. Each researcher analyzed the forms and completed under the themes at stage one. The researchers checked analysis of each other and agreed on the analysis at stage two.

Findings

The findings from the research are provided under the theme topics. View of preservice teachers on blogs:

- Positive and negative aspects of blogs,
- Contribution to professional and personal development,
- View on blogs being open to sharing, and
- View of assigned teachers on the blogs

Positive and negative aspects of blogs

Table 1 and Table 2 provide the views addressed under positive and negative aspects of blogs.

Table 1

Positive views on blogs

Views	Frequency (f)	Percent (%)
Documentation of experience	9	45
Deducing from others' experience	8	40
Reviewing experience	7	35
Expressing feelings & thoughts in writing	3	15
Encountering real problems	3	15
A free environment	3	15
Planned	2	10
Giving motivation	1	5
Easy to use	1	5
An individualized environment	1	5
Objective assessment	1	5
Learning not restricted by classes	1	5
Directive as provided in questions	1	5
Possibility for in-depth analysis of process	1	5
Repeating what is learnt	1	5
Concretization of problems	1	5
Reinforcement of solutions	1	5
Thinking over problems	1	5

As indicated in Table 1, majority of preservice teachers found blogs useful and delivered positive view on the blogs. The example of views of preservice teachers supporting this finding is provided below:

> "The reflective blogs have allowed us to gather experience together we had in teaching practice with the help of questions and assess it with an objective point of view. So, we were able to make comments on the cases from different perspectives."

> "One of the positive results is that we were able to write our blogs more sincerely because a blog is easy to use, it can be individualized, and it is a free environment. Another thing is that I was able to make comments on thoughts of other people through blogs. I don't think that it has a negative aspect."

As seen in the views of students, the mostly expressed views include ability to document experience through blogs, and opportunity provided by blogs to deduce from others' experience and to review experience. Other positive views include opportunity provided by blogs to express feelings and thoughts in writing, encountering real problems on blogs, and being a free environment to convey experience. Besides this, the preservice teachers emphasized that a blog puts teaching practice process into plan and enhances motivation for courses, learning is not limited to classes, it concretizes the problems encountered in practice and reinforces the solutions, and they think over problem cases through blogs and are able to make an objective assessment.

Some of the preservice teachers delivered negative views on using blogs. Table 2 provides these views.

Table 2

Negative views on blogs

Views	Frequency (f)	Percent (%)
None	11	55
An environment not visited frequently as other social netw.	2	10
Questions repeat one another	2	10
Excessive work load	1	5
Boring	1	5
Less interaction	1	5

As indicated in Table 2, the students delivering negative view expressed that a blog is not an environment that is frequently visited as other social networks, and the questions raised on the blogs repeat one another. Other negative views are that a blog puts excessive work load on the classes and is boring, and there is less interaction in a blog environment.

The example of negative views of preservice teachers on using blogs is provided below.

> *"Only negative aspect is that Facebook is frequently used online and we have push notification, therefore we are able to make comments one another and read writing of others more frequently. This could also be used for environment of blogs."*
>
> *"I remember that blogs made me tired and bored a little. I remember that I was reluctant to participate in blogs because my motivation was very low."*

Contribution of blogs to personal and professional development of preservice teachers

Table 3 and Table 4 provide view of preservice teachers on contribution of blogs to their professional and personal development.

Table 3

Contribution of Blogs to Professional Development

Views	Frequency (f)	Percent (%)
Gaining experience from others' life	4	20
Using blogs in classes	3	15
Adoption of teaching profession	3	15
Description of cases	2	10
Realization of imperfections	2	10
Assessment of processes	2	10
Classroom management	1	5
Time management	1	5
Possibility of practicing	1	5
Researching	1	5
Gaining experience other than routines	1	5
Focusing on one matter	1	5

The preservice teachers expressed that they regarded contribution of blogs to their professional development as an opportunity to gain experience from others' sharing and life

of teaching practice, and they met an application which they could use for their own class. The preservice teachers pointed out that blogs helped them to adopt teaching profession, to describe cases they encountered, to realize imperfections, and to assess the process of teaching practice. They also indicated that writing a blog made a contribution to them for classroom and time management, they found an opportunity to practice what they learned, and writing directed them to do research. Some of them stated that they gained experience other than routines in the class of Teaching Practice, and they focused on matters where they had problems and addressed it in-depth. Table 4 provides contribution of blogs to personal development of preservice teachers.

Table 4

Contribution of Blogs to Personal Development

Views	Frequency (f)	Percent (%)
Self-assessment	11	55
Monitoring self-development	6	30
Gaining critical point of view	4	20
Improvement of ability to write	4	20
Ability to use blogs	3	15
Self-control	2	10
Self-confidence	2	10
Self-criticism	1	5
Realization of self-skills	1	5
Self-learning	1	5
Thinking in detail	1	5
Development of sense of responsibility	1	5
None	1	5

The preservice teachers indicated that a blog contributed to self-assessment for personal development, monitoring self-development, gaining critical point of view, improving ability to write, and that keeping a blog regularly gave them responsibility and enabled self-control. The summary of students' view is provided below:

> *"It has highly improved my ability to write. Writing is an act that I have ignored throughout my life such that I wasn't even aware that I couldn't write well. I had to write both letters frequently and write a blog in that period of my life, and this has improved me a lot."*

> *"Writing one's own experience allows you to make a self-assessment. We've written where we had difficulties by presenting a slice of our lives using questions*

in themes provided. We've also written incidents we had difficulty but finally overcame. Since other friends did the same, we've had idea about problems we may have in the future, although we haven't had during the internship period."

Views on Blogs Being Open to Sharing

The preservice teachers found useful in some respects that blogs are open to sharing on the web. Table 5 provides the relevant views:

Table 5

Views on Blogs Being Open to Sharing

Views	Frequency (f)	Percent (%)
Seeing different point of views	9	45
Being more attentive	2	10
Under-expressing because of refraining from others	2	10
Reading what you write by large masses	1	5
Development of thoughts	1	5
Experience sharing	1	5
Realization of overlooked matters	1	5
Spending more time in the environment	1	5
Should be accessible after everyone's written, for being original	1	5

The positive aspects that the content of blogs is opened to sharing of anybody include seeing different point of views, trying to write more attentively, reading what is written by large masses, developing thoughts, sharing experience with others, and realizing overlooked matters during practicing. However, some of the preservice teachers reported that they could not fully express their thought because the content of the blog was opened to sharing, and it would be more useful if it was opened to sharing after they completed writing on the blog. The summary of students' view is provided below:

" ... being in the position to read writing of others and make comments on it have made considerable contribution to use in terms of our profession. This is because we've seen different lives and processes use for such lives other than experience we have individually. This allowed us to gain experience from others' life and to think "I wonder what I would do if I were him/her"

"As said by J. M. Keynes, 'We'll all be dead in the long term" and losing accumulation we've acquired with us would be a loss of activity. Information is information when it is shared. It remains just a secret when it is hidden. Besides, I

think that I've learnt a lot from not only our teachers but also from my friends in that time. Their experience and attitude was also important to me. Therefore, it was good to share it for me."

In addition to this, some expressed negative aspects of being open to sharing what was written, such as under-expressing thoughts because of refraining from friends and being influenced by writing of others.

View of Assigned Teachers on Blogs

In regard to view of three teachers, who received this class in 2013-2014 Academic year and were assigned as teacher of Information Technologies, on contribution of reflective blog to their professional life, the teachers stated that keeping a blog improved their ability to write, they continued to write a blog, they wanted to use it if it was possible to do so, they often read their previous blogs, they compared their previous experience with the new one, and they had an opportunity to review their past experience.

> *"Certainly, this process made some contribution. On the blog, I can compare my view before I took a step into teaching with my view when I am teaching."*

> *"For now, I can't afford technically but I want to use blogs in my class if possible. I've realized that I write more carefully when I use it, that is what my students need."*

Results, Discussion and Recommendations

The preservice teachers participated in research found keeping a blog useful to a large extent, however some preservice teachers mentioned that blogs had also some negative aspects. The positive aspects that were mostly mentioned by the preservice teachers include documenting experience through blogs, an opportunity provided by blogs to deduce from others' experience, to review experience, and to express feelings and thoughts in writing, and an opportunity offered by blogs to provide a free environment for conveying experience. Hourigan and Murray (2010) indicated that keeping a blog improved ability of individuals to write. In a research by Mansor (2011) investigating the effect of blogs on the reflective thinking, the author suggested that students enriched their learning through their friend's blog

as well as blogs improved their ability to write. Although many preservice teachers mentioned keeping a blog did not have a negative side, several of them noted that it was unfavorable that environment of blogs was not often visited. This view can be explained by increased graphic of use of social networks and by probability of failure of blogs to achieve such increase. In addition, lack of push notification function that is used by several social network applications such as Facebook might not motivate preservice teachers to enter the environment.

A large number of preservice teachers emphasized that blogs were useful both for personal development and professional development. The mostly mentioned benefit of blogs was that preservice teachers read their friend's blog and deduced from their friend's experience in their own way. The preservice teachers expressed that they read their friend's problems and solution suggestions in terms of communication, classroom management, time management and profession and deduced from others' experience. Chu, Chan and Tiwari (2012) reported that preservice teachers using blogs suggested that reading their friend's blog allowed benefiting from others' experience in problem solving. Lin and Shen (2013) performed a similar study on individuals studying nursing and concluded that reflective blogs of individuals helped their learning in depth, professional development and seeing other individuals' point of view. The preservice teachers pointed out that they reviewed what they learnt during the class and assessed the process through blogs. Several preservice teachers indicated that they had self-control over their learning in the class through blogs and the environment of blogs became a personal learning environment to them. Similarly, Tomberg, Laanpere, Ley and Normak (2013) reported that blogs both were a tool for teachers to allow controlling and coordinating the class and created an individualized learning environment. The blogs are a learning instrument used as a communication, reflection, cooperation and social support tool during the internship period (Chu, Chan, & Tiwari, 2012). The blogs also make favorable contribution to the teaching practice process because they are open to sharing. On the other hand, Xie, Ke and Sharma (2008) stated that keeping a blog made positive contribution to the reflective thinking and learning output of university students, but as blogs were open to sharing, this reduced the reflectivity of the content of the blog.

When it is considered that the class of Teaching Practice is a process of gaining experience and sharing, it is concluded based on the view of preservice teachers that a blog is an appropriate tool for this process. Deng and Yuen (2011) reported that preservice teachers

using blogs mentioned that reading their friend's blogs made favorable contribution to their learning and received emotional support from friends. Killeavy and Moloney (2010) suggested that newly assigned teachers improved their reflective practice on teaching experience through blogs, and a community of practice was established that received support from colleagues by means of blogs.

It appears that the effect of blogs was maintained in the processes after preservice teachers had been assigned. The teachers verbalized that they wanted to use blogs in their own class if it was possible. Referencing by teachers to previously written blogs to compare past and present experience and to review what they experienced indicates that blogs have become a written reference guide to them. When it is considered that the mostly mentioned positive aspect by the preservice teachers was to document experience, it is obvious that such consequence is inevitable.

The results suggest that it is necessary to provide preservice teachers with practice environment where they can reflect their own feelings, thoughts and experience. It can be recommended to support preservice teachers to interact more, to enable faculty-school cooperation, and to include practice teachers in the process. In addition, it can be suggested that it is necessary to use environments for teacher education, which would promote students' reflective thinking and are more interactive, and where more time is spent such as social networks. So, it is considered that use of such environments can be maintained.

References

Anılan, H., & Anagün, Ş.S. (2007). Öğretmen adaylarının kendi mesleki gelişimlerini değerlendirmeleri. *Proceedings of XVI. Ulusal Eğitim Bilimleri Kongresi,* 261-268.

Atay, D.Y. (2003). *Öğretmen eğitiminin değişen yüzü.* Ankara: Nobel Yayın Dağıtım.

Bataineh, R.F., El Karasneh, M. S., & Barakat, A.A (2007). Jordanian pre- service teachers' perceptions of the portfolio as a reflective learning tool. *Asia- Pacific Journal of Teacher Education, 35*(4), 435-454.

Bayrak, F., & Koçak Usluel, Y. (2011). Günlük uygulamasının yansıtıcı düşünme becerisi üzerine etkisi. *Hacettepe Üniversitesi, Eğitim Fakültesi Dergisi. 40*, 93-114.

Chu, S.K., Chan, C.K., & Tiwari, A.F. (2012). Using blogs to support learning during internship. *Computers & Education*, *58*(3), 989-1000.

Collin, S., & Karsenti, T. (2011). The collective dimension of reflective practice: The how and why. *Reflective Practice: International and Multidisciplinary Perspectives*, *12*(4), 569-581.

Deng, L., & Yuen, A.H. (2011). Towards a framework for educational affordances of blogs. *Computers & Education*, *56*(2), 441-451.

Dewey, J. (1933). *How we think. A restatement of the relation of reflective thinking to the educative process,* Boston: D. C. Heath.

Duban, N., & Yanpar Yelken, T. (2010). Öğretmen adaylarının yansıtıcı düşünme eğilimleri ve yansıtıcı öğretmen özellikleriyle ilgili görüşleri. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 19*(2), 343-360.

Ekiz, D. (2006). Kendini ve başkalarını izleme: Sınıf öğretmeni adaylarının yansıtıcı günlükleri. *İlköğretim Online, 5*(1), 45-57.

Ersözlü, Z.N., & Kazu, H. (2011).İlköğretim beşinci sınıf sosyal bilgiler dersinde uygulanan yansıtıcı düşünmeyi geliştirme etkinliklerinin akademik başarıya etkisi. *Uludağ Üniversitesi Eğitim Fakültesi Dergisi, 24*(1), 141-159.

Gedik, H., Akhan, N.E., & Kılıçoğlu, G. (2014). Sosyal bilgiler öğretmen adaylarının yansıtıcı düşünme eğilimleri. *Mediterranean Journal of Humanities, 4*(2), 113-130.

Hourigan, T., & Murray, L. (2010). Using blogs to help language students to develop reflective learning strategies: Towards a pedagogical framework. *Australasian Journal of Educational Technology, 26*(2), 209-225.

Işıkoğlu, N. (2007). The role of reflective journals in early childhood pre-service teachers' professional development. *Educational Sciences: Theory & Practice, 7*(2), 819-825.

Jacklinga, B., Natolia, R., Siddiquea, S., & Sciullia, N. (2014). Student attitudes to blogs: A case study of reflective and collaborative learning. *Assessment & Evaluation in Higher Education, 40*(4), 542-556.

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.

Kang, I., Bonk, C.J., & Kim, M.C. (2011). A case study of blog-based learning in Korea: Technology becomes pedagogy. *The Internet and Higher Education, 14*(4), 227-235.

Killeavy, M., & Moloney, A. (2010). Reflection in a social space: Can blogging support reflective practice for beginning teachers?. *Teaching and Teacher Education*, *26*(4), 1070-1076.

Koç, C., & Yıldız, H. (2012). Öğretmenlik uygulamasının yansıtıcıları: Günlükler. *Eğitim ve Bilim, 37*(164), 223-236.

Köksal, N., & Demirel Ö. (2008). Yansıtıcı düşünmenin öğretmen adaylarının öğretmenlik uygulamalarına katkıları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 34*, 189-203.

Lai, T., & Land, S.M. (2009). *Supporting reflection in online learning environments.* Educational Media and Technology Yearbook (pp. 141-154). Thousand Oaks, CA: Sage.

Lee, H. J. (2005). Understanding and assessing pre-service teachers' reflective thinking. *Teaching and Teacher, 21*(1), 699-715.

Lee, I. (2008). Fostering preservice reflection through response journals. *Teacher Education Quarterly, 35*(1), 117-139.

Lin, K.Y., & Shen, Y.F. (2013). The nursing students' attitude toward using blogs in a nursing clinical practicum in Taiwan: A 3-R framework. *Nurse Education Today, 33*(9), 1079-1082.

Mansor, A.Z. (2011). Reflective learning journal using blog. *Procedia -Social and Behavioral Sciences, 18*, 507-516.

Meredith, C. (2010). Teaching reflective skills and PDP to international students: How effective is the use of pebblepad? *Brookes eJournal of Learning and Teaching 2*(5).

Richardson, W. (2006). *Blogs, wikis, podcast and other powerful web tools for classrooms.* California: Corwin Press.

Schön, D.A. (1983). *The reflective practitioner: How professionals think in action.* London: Temple Smith.

Shoffner, M. (2006). The potential of weblogs in pre-service teachers' reflective practice. In C. Crawford et al. (Eds.). *Proceedings of Society for Information Technology and Teacher Education International Conference,* 2409-2415. Chesapeake, VA: AACE.

Taggart, G.L., & Wilson, A.P. (1998). *Promoting reflective thinking in teachers.* Thousand Oaks, CA: Corwin Press, Inc.

Tok, Ş. (2008). Yansıtıcı düşünmeyi geliştirici etkinliklerin öğretmen adaylarının öğretmenlik mesleğine yönelik tutumlarına, performanslarına ve yansıtmalarına etkisi. *Eğitim ve Bilim, 33*(149), 104-117.

Tomberg, V., Laanpere, M., Ley, T., & Normak, P. (2013). Sustaining teacher control in a blog-based personal learning environment. *The International Review of Research in Open and Distance Learning*, *14*(3), 109-133.

Usluel, Y.K., & Mazman, S.G. (2009). Adoption process of web 2.0 tools in distance education, *Procedia - Social and Behavioral Sciences, 1*(1), 818-823.

Xie, Y., Ke, F., & Sharma, P. (2008). The effect of peer feedback for blogging on college students' reflective learning processes. *The Internet and Higher Education, 11*(1), 18-25.

Yang, S.H. (2009). Using blogs to enhance critical reflection and community of practice. *Educational Technology & Society, 12*(2), 11-21.

Yeo, H., & Lee, Y.L. (2014). Exploring new potentials of blogs for learning: Can children use blogs for personal information management (PIM)? *British Journal of Educational Technology. 45*(5), 916-925.

Yıldırım, A., & Şimşek, H. (2006). *Sosyal bilimlerde nitel araştırma yöntemleri. (*6th ed.). Ankara: Seçkin Yayıncılık.

Yin, R.K. (2003). *Case study research: Design and methods*. (3rd ed.). Thousand Oaks, CA: Sage Publications.