RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: February 22, 2024 Accepted: May 1, 2024 http://dergipark.org.tr/rep

Research Article

e-ISSN: 2602-3733 Copyright © 2024 December 2024 • 8(2) • 253-280

https://doi.org/10.54535/rep.1441532

Professional Development Experiences of Autodidactic Teachers

Kerim Arı¹

Ministry of National Education

Mustafa Yavuz²

Necmettin Erbakan University

Abstract

In this study, it was aimed to determine the views of self-learning teachers on their professional development. In this direction, phenomenological research design from qualitative research methods was used in the research. In the research group, there are 16 teachers working in Meram district of Konya province between June and December in 2023 and giving importance to their professional development. The data were collected through a semi-structured interview form and content analysis method was used to analyse the data. As a result, it was concluded that the participant teachers frequently participated in in-service training activities for their professional development experiences, used social media effectively, felt the need for professional development because they did not consider their current training sufficient, they have been learning teachers since they started their profession, and their motivation and self-confidence increased after the trainings they attended, that they have learning outside the professional development are student expectations and appreciation, that they receive support from their families, but that they are not provided with sufficient support by their managers and colleagues.

Key Words

Autodidactic teacher • Professional development • Self-directed learning

¹ **Correspondance to:** Ministry of National Education, Konya, Türkiye. E-mail: kerim.ari90@gmail.com **ORCID:** 0000-0001-9704-6205

² Necmettin Erbakan University, Ahmet Keleşoğlu Faculty of Education, Konya, Türkiye. E-mail: mustafayavuz@erbakan.edu.tr **ORCID:** 0000-0001-5697-5120

Citation: Arı, K., & Yavuz, M. (2024). Professional development experiences of autodidactic teachers. *Research on Education and Psychology (REP)*, 8(2), 253-280.

Introduction

Today, changes and transformations are very fast due to technological developments and it is difficult for people to keep up with this situation. Teachers are expected to have various qualifications in order to keep up with the developing world conditions. The most important task in gaining these qualifications falls to education (Karagöz, 2003). Change has manifested itself in people's working areas as in every field. For this reason, people's individual and professional development after starting their profession has become as important as their pre-service training. In this context, organisations need to give importance to the development of their employees in order to keep up with the changing world conditions and to maintain their existence.

It is an obvious fact that the achievements of an individual who graduates from an educational institution will not be sufficient to ensure continuous success, stability and efficiency during his/her employment in any profession (Gebel & Bozkurt, 2021). The ability of public officials to do their jobs effectively and efficiently depends on their self-development. The knowledge and skills gained through pre-service training are not sufficient to maintain professional life effectively and efficiently (Erdem & Şimşek, 2013). Individuals who fulfil the teaching profession should improve themselves and keep up with the requirements of the age, especially since their capital is human.

In a rapidly changing world, the tasks expected from educational institutions are differentiating. The roles and responsibilities expected from teachers in educational institutions are also diversifying and increasing due to these changes. Training qualified teachers who will fulfil their duties successfully is a necessity for the success of the education system (Özoğlu, 2010). The teaching profession involves a process that is not static from past to present due to its structure (Uştu et al., 2016). Therefore, it is important for teachers to improve their training and skills within the profession. Factors such as changes in legislation, change and development of instructional technologies and other professional development needs make it necessary for teachers to improve themselves (Taşlıbeyaz et al., 2014).

Lifelong Learning

Rapidly developing technology brings many changes in human life. This change makes it necessary for people to learn throughout their lives. Because the current knowledge of human beings can lose its validity very quickly with the constantly changing and developing world. The adaptation of people to the society in which they live and keeping up with the innovations and developments in business life can only be possible by renewing themselves. It is the learning activities in the life of the individual that will ensure this. Lifelong learning is defined as all kinds of learning activities in which the individual is involved throughout his/her life in order to improve his/her knowledge, skills and competences with an approach related to factors such as individual, social, social and employment (MEB, 2009). According to another definition, lifelong learning is all learning activities that aim to improve the knowledge, skills and competences that the individual will use throughout life in personal, social or professional dimension (Cetinkaya et al., 2019).

Schools are no longer the only place where learning is provided. Learning is a lifelong process and is spread to every stage of human life, from formal school education to in-service training at workplaces, from the use of technology to museum visits. When people have the desire to learn, the sources to learn are very diverse. Such people can turn everything around them into learning opportunities. Lifelong learners are individuals who are interested in innovations and developments. The characteristics of these individuals such as perseverance, curiosity, organising learning and motivation come to the fore (Diker Coşkun & Demirel, 2012). In other words, in order to realise learning, the individual must be determined, curious, regulate his/her own learning process and have full motivation. In short, motivation, which can be defined as the power that pushes the individual to work to achieve the goal, is one of the important factors of the learning process. The individual must feel enough energy to complete the process and reach the goal in new or long-standing jobs. Lifelong learning can be realised by motivated individuals who feel the necessity of learning. Because a large part of lifelong learning consists of individual learning.

There are three main functions of lifelong learning. These are lifelong learning for economic development, personal development and self-realisation, social inclusion and democratic understanding and action. If we think in terms of teaching profession, thanks to lifelong learning, teachers will ensure their personal and professional development and contribute to their self-actualisation processes. In addition, teachers who have developed themselves with lifelong learning will raise well-equipped students, which will contribute positively to the economy and employment. Again, by giving importance to learning and development, it will become easier for teachers to accept themselves to the society, and at the same time, they will contribute to the formation of a more democratic and livable society. The classification of lifelong learning is adult education, vocational education, continuing education and self-directed education (Wetzel 2010, Jarvis 2004, Livingstone 2001, Eraut 2000; cited in Toprak and Erdogan 2012). Looking at the literature, there are some basic skills that lifelong learners should have. These can be listed as the desire for continuous learning, taking responsibility for one's own learning, reading comprehension, basic numerical skills, oral and written communication skills, effective use of information technologies, personal development ability, effective use of high-level thinking skills, self-regulated learning skills and research skills (Diker Coskun & Demirel, 2012). Individuals with these basic skills can realise lifelong learning. However, various approaches are used in lifelong learning. These approaches are self-directed learning, on-demand learning, cooperative learning and organisational learning (Yazıcı, 2020). Among these approaches, self-directed learning comes to the forefront because teachers take responsibility for their own learning, choose their own professional development goals and participate in activities to achieve these goals, and willingly participate in learning activities.

Lifelong learning is a must for professional development. We are witnessing many innovations and changes in business areas that we had difficulty even imagining ten years ago. As such, people need to attach importance to their professional equipment and fulfil a number of learning activities to keep their professional knowledge and competences up to date.

Professional Development of Teachers

Teaching is a profession that requires professionalism. Duties and responsibilities are determined by various legal regulations. Both teachers' own success and the success of their students are directly related to their professional development. Because professional development has important contributions in terms of increasing performance,

making practices efficient, facilitating the implementation of educational policies, and realising change and transformation (Blanford 2000; as cited in Can, 2019). Teachers need to keep their professional knowledge and skills up-to-date.

Professional development in teaching is defined as the processes and activities aimed at improving the knowledge, skills and behaviours of educators in the profession in order to ensure the success of students (Guskey, 2003). Professional development is a learning process that continues throughout the professional life of teachers and covers all the learning that teachers realise in this process. (Eroğlu & Özbek, 2020).

Various models related to professional development have emerged over time. Although there are various models in the literature, the modelling by Gaible ve Burns (2005), which examines professional development in three dimensions according to its characteristics, stands out. These are standard, region-based and individual-oriented models. Among these models, individual-oriented models are also known as self-managed models. K121lkaya (2012) also categorised professional development activities as Traditional Professional Development Activities and Innovative Professional Development Activities. While traditional professional development activities include activities such as courses, seminars, conferences and workshops known in the classical sense, innovative professional development activities that are not in a specific environment, but spread to the whole learning process and environment. It is seen that innovative approaches include activities such as coaching, mentoring, classroom observation, sharing experiences, peer teaching, cooperative learning. In addition to these models, Ekinci (2015), Yurdakul (2013), Şahin et al. (2016) also mentioned various different models in their studies. In new professional development approaches, teachers develop not only in the professional field but also in individual and social fields. Teachers' professional development (Atal & Sancar, 2021).

Self-Directed Learning

Self-directed learning is the ability to manage one's learning by taking responsibility for one's own learning and to be in control of learning (Tekkol & Demirel, 2016). It is the learner's responsibility what, when, how to learn and how to evaluate what is learnt (Guglielmino & Guglielmino, 2001). Self-directed learning is seen as effective and efficient for reasons such as providing contributions for the specific needs of the learner, offering flexibility in the learning process, providing immediate and long-term gains in developing problem-solving skills, providing highly focused learning, and reducing the cost of learning (Durr, 1992; cited in Uzundiz, 2022).

Self-directed learning is used more in adult education. This is because self-directed learning includes learning outside the fields of education and the individual realises his/her learning according to the goals he/she sets himself/herself. Self-directed learning is closely related to adult education and lifelong learning (Recepoğlu, 2021). Therefore, these learning activities are extra important for professional development. Because individuals can determine the subjects that they have deficiencies in the professional field thanks to their self-management in the profession, and they can continuously learn and improve themselves by planning their own learning process to overcome their deficiencies. For this reason, teachers who need to constantly improve themselves and keep

themselves up to date should also have self-directed learning skills. (Şahin & Erden, 2009). Towle and Cottrell (1996) listed these self-directed learning skills as follows:

- Setting their own learning goals,
- Identify appropriate learning resources,
- Choosing appropriate learning strategies,
- To distinguish between unimportant information and important information,
- Integration of material from different sources,
- Time management,
- Monitoring the achievement of learning outcomes,
- Monitoring the effectiveness of personal work habits.

Self-directed learning takes place in five different stages in the process. These stages can be listed as identification, planning, implementation, reviewing-reviewing and sharing (Knowles, 1975; cited in Bayram, 2023). In the identification stage, learning needs are identified. In the planning stage, learning objectives are formulated. In the implementation phase, resources to be utilised are determined. In the review-review stage, the learner selects and applies learning strategies for learning needs. In the sharing step, the learner determines the learning products. At this stage, concrete evidence is needed to see the effectiveness of the learner in the process. A road map was determined at the point of implementation of these stages in educational environments and this was named as self-directed learning cycle (Bayram, 2023). In this cycle, goal setting (pre-assessment and informing about the gains), evaluation (evaluation of strengths and weaknesses), planning (making a plan suitable for the process), implementation-monitoring (implementation of learning strategies and monitoring of the process), reflection (reflection and evaluation of learners' own performances) steps are included.

Determining the perceptions of teachers who are able to self-learn about professional development will make important contributions to the process of making plans and developing strategies for teachers' professional development. On the other hand, it is seen that most of the studies in the literature are related to in-service training of teachers or professional development of all teachers; there are few studies on teachers who can provide professional development and learn to learn. This study will also contribute to filling this gap in the literature. In this study, it was aimed to determine the views of self-learning teachers about their professional development experiences.

Method

Research Design

This research, which aims to determine the opinions of teachers about their professional development experiences, was conducted using qualitative research method. Qualitative research is a research method in which qualitative research methods such as observation, interview, document analysis are used as data collection methods and a qualitative process is followed to reveal events and perceptions in a realistic and holistic way in a natural environment (Tutar & Erdem, 2022). In this study, phenomenology, which is one of the qualitative research method

designs, was used as the design. This design focuses on phenomena that are aware of but do not have a detailed and in-depth understanding. The phenomena can be encountered in various ways such as event, experience, orientation, situation. However, this does not mean that the phenomena are understood. Phenomenology can be used for studies aiming to investigate these phenomena that are not fully understood (Yıldırım & Şimşek, 2021). Phenomenology aims to reach the essence of one's experience and focuses on attitudes, prejudices, thoughts and experiences. Since the research aims to determine the views of teachers on professional development experiences, the research is characterised as a phenomenological study.

Study Group

The research was carried out with 16 teachers working in Meram district of Konya province who volunteered to participate in the research. Criterion sampling was used in the selection of the study group. The basic understanding of criterion sampling is to study all situations that meet a predetermined set of criteria (Yıldırım & Şimşek, 2021). Two basic criteria were determined as that the participants had participated in various activities on professional development and that they were actively working. In addition, snowball (chain) sampling technique, which is the most appropriate for the content of the research, was used in the selection of the participants. This method is a sampling method in which the researcher finds new participants through these individuals after finding the first research group or individuals, and then reaches new ones through them. The aim of this method is to enrich the information by defining situations by reaching from person to person and from person to events (Creswell, 2021). This method allows in-depth study of situations that are thought to have rich information. In this context, a teacher who is thought to attach importance to professional development and to be able to realise his/her own learning was interviewed and new participants were identified through him/her. Each newly interviewed participant was asked whether he/she knew anyone suitable for the research group and other participants were reached and interviews were conducted. The data on the socio-demographic characteristics of the teachers participating in the study are shown in Table 1.

Table 1

Socio-demographic characteristics of the teachers participating in the study

Variables		f	%
	Male	7	44
Gender	Female	9	56
	20-30	3	19
A	31-40	7	44
Age	41-50	5	31
	51 and above	1	6
	Bachelor's Degree	11	69
Education Level	Master's Degree	5	31
Duration of Professional Seniority	1-10	6	38
	11-20	5	31
	21 and above	5	31
Branch	English	2	13
	Science	2	13
	Classroom Teaching	6	38
	Psychological Counselling and Guidance	1	6
	Special Education	1	6
	Maths	1	6
	Preschool	3	18
	Total	16	100

Research Instruments and Processes

Interview method was used as a data collection tool in the study. This method is the most frequently used data collection method in the field of social sciences and this is due to the fact that the interview method is a very effective method for obtaining information about individuals' attitudes, opinions, complaints, experiences, feelings, complaints and beliefs (Briggs, 1986; as cited in Yıldırım & Şimşek, 2021). Although interviewing seems to be an easy method in data collection, it has various difficulties in itself. For this, a detailed plan on how to ask the questions prepared in advance and how to collect the data should be made and implemented.

The data collection tool used in the study consists of two parts. The first one is the "Personal Information Form" which aims to learn the socio-demographic information of the participant teachers. The second one is the "Semi-Structured Interview Form" in which teachers' views on their professional development experiences are collected. In this form, teachers were asked open-ended interview questions prepared by the researcher with the support of experts. There are eight open-ended questions in the interview form. These are as follows:

- 1. Which resources do you use for your professional development, what kind of activities do you participate in?
- 2. How did you feel your need for professional development?

- 3. How long have you been a learning teacher, what are the factors that motivate you to learn?
- 4. For what purpose do you attend in-service trainings organised by the Ministry of National Education?
- 5. What kind of changes did you feel after the trainings you received for your professional development?
- 6. Is the learning in your life only related to your profession? What else do you learn? Where do you learn from?
- 7. What are your motivation sources for self-improvement?
- 8. What do you think about your environment supporting your learning?

The interviews conducted in the study were carried out between June and December 2023. The availability of the teachers was learnt and suitable environments were provided where they could express themselves comfortably. No guidance was given during the interview and the purpose of the interview was explained in detail. The answers given by the teachers were recorded with a voice recorder, and the answers of the participants who did not consent to be recorded were written on the interview form and the data were collected. Thus, it was tried to determine the opinions of the teachers about their professional development experiences.

Validity and Reliability

Validity in qualitative research is briefly expressed by Creswell (2016) as the accuracy and reasonableness of the findings. Validity is possible by collecting and interpreting the data appropriately so that the research results accurately reflect the real world studied (Yin, 2011). For this purpose, in order to ensure the validity of the research, the sample was defined in detail, snowball sampling model was used as the sample, literature review was made, theoretical framework was created, data collection tools and data analysis process were explained in detail, the process steps and application process of the research were explained, participants were selected on the basis of volunteerism, interviews were recorded and participant confirmation was made, direct quotations were included in the study. In short, it is tried to ensure that the reader can draw lessons and experiences related to his/her own life and that the controls made to ensure consistency in the research are understood by the reader.

Reliability in the traditional sense refers to the consistency and reproducibility of research findings. Since the research tool in qualitative research is the researcher himself, the data obtained may not always be consistent and reproducible. The reason for this is what the researcher sees, what conclusions he/she reaches, personal characteristics and experiences (Yağar & Dökme, 2018). However, various methods are used to ensure reliability in qualitative research. These methods include ensuring that the sample size is sufficient, more sources and opinions are consulted, the data are stored well, the study environment and the position of the researcher are fully specified, and the study is conducted impartially (Yıldırım & Şimşek, 2008). In short, in order to be able to talk about reliability in qualitative research, the researcher must meticulously carry out and report all processes, starting from the beginning of the interview, including the reporting of the analyses (Arslan, 2022). In this context, in order to ensure the reliability of the research, the sample size was selected in accordance with the research topic, semi-structured interview form was used, expert support was received, the research process was reported in detail, support was

received from the theory during the research and attention was paid to be impartial, the interviews were recorded and carefully kept, and the findings were directly reported.

Data Analysis

Data analysis in qualitative research includes the preparation and organisation of data for analysis, coding the data and reducing them to themes by combining the codes, and finally presenting the data in figures or a discussion (Creswell, 2021). One of the most important processes of qualitative research is data analysis. Because the aim is to make the findings meaningful. Content analysis type was used to analyse the data in the study. The content analysis process is based on conceptualising the data and explaining the patterns between concepts through themes (Yıldırım & Şimşek, 2021). The process is actually to bring together similar data within the framework of concepts and themes and to organise and interpret them in a way that the reader can understand. In the research, the opinions of teachers about their professional development experiences are tried to be determined.

In order to ensure the confidentiality of the participants in the interviews, the participants were coded as P1, P2, P3, The audio recordings during the interviews were listened to and transcribed by the researcher. Based on the sub-questions used in the research, themes were determined and grouped and the analysis process was carried out based on these themes.

Results

The data collected through semi-structured interview forms were analysed and the findings related to teachers' professional development experiences are given below.

Activities Participated in and Resources Utilised for Professional Development

In the research, the participants were asked the question "Which resources do you use for your professional development, what kind of activities do you participate in?" and the answers were analysed. Teachers generally stated that the resources they benefit from for their professional development are face-to-face and distance inservice trainings of the Ministry of National Education, social media, scientific publications. Regarding the activities they participate in, branch/field trainings, national and international project trainings come to the fore. The themes/codes and frequency values related to the answers given by the teachers are shown in Table 2.

Table 2

Resources utilized for professional development and activities attended

Themes/Codes	
Sources Utilised	f
Social Media	9
Scientific Publications	9
Experts/Academics	4
Ministry of National Education Face-to-Face In-Service Trainings	10
Ministry of National Education Remote In-Service Trainings	12
Books	
Colleagues	6
Training and Congresses Organised by Universities	3
European Distance Education Platforms	5
Trainings of Education Foundations	6
CBIKO Distance Education Gateway	1
	1
Activities Participated	f
Digital Designs (Game, graphics etc.)	1
Coding	3
Web 2/Web 3 tools	2
Branch/Field Trainings	12
National and International Project Trainings	9
Model Aircraft Construction	1
Drama	1
Artificial Intelligence	1
Effective Communication	1

Note: Some teachers expressed more than one opinion.

Some teachers' opinions about the resources utilised for professional development and the activities attended are as follows:

(P2): "First of all, the most important resources I use are scientific researches and articles. Especially after I started my master's degree, I learnt that the main information is from there and in recent years, I have been using scientific researches for professional development. In addition, another source I use is social media and the posts or guidance of teachers or academics interested in this field on the internet and youtube."

(P4) "I follow the developments related to my branch. I try to buy new books and publications. Since my branch is intertwined with many fields, I participate in artistic, drama, seminar, workshop, etwinning, erasmus projects in order to develop in many fields. I try to take part in local and European projects."

(K9):" Actually, I did not make much effort to develop my profession until I met e-Twinning. For example, before, I used to try to attend all kinds of in-service training courses, I used to submit petitions, most of them were not accepted, I don't know why. After e-Twinning, I continue my professional development through online training platforms on the internet such as School Education Gateway, e-Twinning Eba Online, Bill Gatesnet."

(P14):" For my professional development, I mostly attend seminars and courses organised by the Ministry of National Education. I also read articles and written materials, mostly international publications. The types of activities I participate in are courses and seminars for both my own development and the development of students. For example, I participate in project writing, robotic coding, model aircraft making, Etwinning-erasmus project trainings and technology-based activities."

Reason for Feeling the Need for Professional Development

Regarding the second sub-question of the study, the participants were asked the question "How did you feel your need for professional development?" and the answers were analysed. Teachers generally stated that the reasons for feeling the need for professional development were not seeing their current education as sufficient, being productive for students and technological changes. The themes/codes and frequency values related to the answers given by the teachers are shown in Table 3.

Table 3

Reason for feeling the need for professional development

Themes/Codes	
Reason for Feeling the Need for Professional Development	f
Change in Student Profile	4
To be efficient to students	6
Not Considering Current Education Insufficient	9
Intrinsic Willingness to Learn	3
Technological Changes	8
Limitation in Social Activities	1
Willingness to Show Yourself	1

Note: Some teachers expressed more than one opinion.

Some teachers' opinions about the reasons for feeling the need for professional development are as follows:

(P1): "I determine my professional development needs according to the student profile. Our student profile changes every 4 years. Each new generation is more technological and more insatiable. In order to respond to the demands of these children, I definitely engage in a new activity to renew myself every 4 years in my teaching life."

(P5) "My need for professional development emerged when I wanted to acquire new skills and improve my existing skills. I can list the things that make me feel this need as realising that my current skills are insufficient, comparisons in my environment, being open to innovations and changes, the desire to deepen in the fields I am interested in, the limited social activities in my environment."

(K8): "I was very bored while doing the activities in the books sent by the Ministry of National Education. In the first years of my profession, there was a teacher's manual. It was going step by step like this. I teach the sequence, but the children finish it as soon as possible. So I said that this activity is not enough for them. In other words, it is not a sufficient activity. My adventure started with how to improve it."

(P11): "The first thing that lit the fire was when I came to the teachers' room, I realised that many words and concepts were foreign to my mind when teachers who were 15 years and 10 years older than me were talking, and I felt inadequate."

Teacher Learning Time and Mobilising Factors for Learning

Regarding the third sub-question of the research, the participants were asked the question "How long have you been a learning teacher, what are the factors that motivate you to learn?" and the answers were analysed. Almost all of the teachers stated that they have been in the learning process since the first day. Regarding the factors that motivate them to learn, the main views of the teachers were efficient lesson teaching, pleasure of learning, changes and transformations in the world. The themes/codes and frequency values related to the answers given by the teachers are shown in Table 4.

Table 4

Teacher learning time and mobilising factors for learning

Themes/Codes	
Learner Teaching Duration	f
Since the beginning of the profession	13
Since the beginning of university	2
For 5 years	1
Motivating Factors for Learning	f
Curiosity	4
Efficient lesson processing	7
Pleasure of learning	6
Keeping information up to date	2
Acquiring a new environment	1
Desire for specialisation	1
Changes and transformations in the world	6
Desire to be a leader	1
Starting postgraduate education	1
Environment	1

Note: Some teachers expressed more than one opinion.

Some of the teachers' opinions about the learning teacher training period and the factors that mobilise them for learning are as follows:

(P3): "I have been trying to be a continuously learning teacher for about 4 years since I graduated. The main thing that motivates me in learning is my sense of curiosity. I enjoy learning."

(P6): "I have been a learning teacher for 5 years. I can say that the most basic factor that motivates me to learn is the developments in the world, technological developments, the change in the educational needs of students every year, and the change in education."

(P12): "I have been trying to learn since I started my profession. The sharing of my clients in the counselling process, my desire to be productive for them, the needs of my students, the developments in my field stimulate my learning."

(P15): "I am always open to learning. The more I learn, the more I realise that I need to know more. New things excite me and support my students to grow up in accordance with this age."

Reason for Attending In-Service Trainings within the Ministry of National Education

Regarding the fourth sub-question of the study, the participants were asked the question "For what purpose do you attend in-service trainings within Ministry of National Education?" and the answers were analysed. Professional development and personal development are the main reasons for teachers to attend in-service trainings within Ministry of National Education. The themes/codes and frequency values related to the answers given by the teachers are shown in Table 5.

Table 5

D C (. 1.	• • • •	• • • • •	• • •	c .• 1	1
Roagon tor att	toudiug in co	prvnee tranning	c within the	ministry of	t national	oducation
Reason for att	епите т-зе		s wunnn me		nauona	ешисинон

Reasons for Attending In-Service Trainings within the Ministry of National Education	f
Issuance of a certificate	2
Professional development	15
Personal development	6
Ex officio delivery of trainings	3
Getting to know new people	2

Note: Some teachers expressed more than one opinion.

Some of the teachers' opinions about the reason for attending in-service trainings within Ministry of National Education are as follows:

(P7): "The Ministry of National Education determines and implements trainings due to a need. I choose the ones that will support my own professional development and contribute to my own development."

(P10): "I attend for professional development purposes. I listen to every training I receive ex officio or voluntarily and try to understand it. It definitely comes in handy one day. From time to time, trainer trainings of the trainings I receive are opened. Being a formator or mentor makes me happy to share what I have learnt with colleagues other than my students and to get to know new people."

(P13): "I participate to improve myself and to learn about innovations and changes in our profession and to apply what we have learnt in our class."

(P16):" I participate in order to improve myself, to keep up with the developing system and to follow my profession in its current state. The certificates given as a result of the trainings may also be necessary in the courses we will open or in the tasks we will take."

Changes Felt After The Trainings

Regarding the fifth sub-question of the research, the participants were asked the question "What kind of changes did you feel after the trainings you received for your professional development?" and the answers were analysed. Teachers stated that after the trainings they received, they taught efficiently, they realised the unknowns, and their self-confidence and motivation increased. The themes/codes and frequency values related to the answers given by the teachers are shown in Table 6.

Table 6

Changes felt after trainings

Themes/codes	
Changes Felt After Trainings	f
Efficient lesson processing	6
Realisation of the unknown	6
Increased self-confidence	4
Increased motivation	4
Willingness to attend other trainings	2
Increased communication skills	1
Critical view	2
Understanding the necessity of development	2
Being the centre of attention	2
Sense of professional competence	2

Note: Some teachers expressed more than one opinion.

Some teachers' opinions about the changes felt after the trainings on professional development are as follows:

(P2): "The biggest change I felt in myself was to realise how much I did not know. After both face-to-face in-service trainings lasting one week in other cities and some online in-service trainings, I realised how much knowledge and experience our profession requires."

(P5): "I think that the trainings we receive for professional development provide me with various advantages. For example, my knowledge and skills about the content provided increase, my self-confidence increases and I am willing to participate in different trainings, my communication skills improve, I gain motivation and feelings of satisfaction, I have different perspectives."

(P12): "The science of psychology is a vast field, my learning process will never end, I enjoy getting to know people, my admiration increases and I feel inadequate from time to time."

(P16): "First of all, making an effort on behalf of one's own profession makes oneself and one's profession valuable. Therefore, the spiritual pleasure is very nice. When you feel good spiritually and physically, this synergy completely surrounds you. It provides a great transition to your students to your target audience."

Learning Outside The Profession And The Places Where They Are Learnt

Regarding the sixth sub-question of the research, the participants were asked the question "Is the learning in your life only related to your profession? What else do you learn? Where do you learn from?" and the answers were analysed. It was found that the main learning of the teachers outside the profession were handicrafts, difficulties encountered in daily life, sports branches and the use of technology. Social media, professional courses and experts come to the forefront regarding the places where teachers realise these learnings. The themes/codes and frequency values for all the answers given by the teachers are shown in Table 7.

Table 7

Learning outside the profession and the places where they were learnt

Themes/Codes		
Learning	f	
Sport disciplines	5	
Language training	2	
Difficulties encountered in everyday life	7	
Music	2	
Technology use	5	
Personal health	2	
Graphic design	1	
Handicrafts	6	
Communication Skills	3	
Plant cultivation	1	
Kitchen work	4	
Mysticism	1	
History	1	
Places Learnt	f	
Professional Courses	5	
Social Media	9	
Scientific publications	1	
Experts	5	
In-service trainings	2	
Colleagues	3	
Books	3	

Not: Note: Some teachers expressed more than one opinion.

Some of the teachers' views on learning outside the profession and the places where they are learnt are as follows:

(P7): "I try to improve myself in many areas, not only learning about my profession. I have received training in pastry, wood painting, vitroy, jewellery design, traditional arts, chocolate making, buckle making, painting, handicrafts, diction, computer, English and drama. I follow the trainings through Instagram, social media, circle of friends and school."

PK6): "We have learnt outside the profession, but this is more based on manual skills, that is, we can go to the group of handicrafts that are about to be forgotten. I am interested in plant growing, gardening and similar works. I benefit from public education courses. I ask for help from people who know this job from our own environment and I learn a little bit by trial and error method."

(P8): "Well, I am always a professional development person, actually, I really admire those who develop their hobbies, they ride horses, swim and so on. Unfortunately, I only have professional development because I can't keep up, otherwise I don't really do anything else."

(P14): "Of course not. Social media, friends and family push people to learn. The deficiencies I encounter in daily life force me to learn about these issues, we learn different things about the needs. Social media is a driving force in this regard."

Sources of Motivation for Professional Development

Regarding the seventh sub-question of the study, the participants were asked the question "What are your motivation sources for self-improvement?" and the answers were analysed. It was found that student expectations and appreciation were the main sources of motivation for teachers' professional development. The themes/codes and frequency values related to the answers given by the teachers are shown in Table 8.

Table 8

Sources of motivation for professional development

Themes/Codes		
Sources of Motivation for Professional Development	f	
Desire to do the best	1	
Using the learnt knowledge	3	
Occupational satisfaction	3	
Student expectations	8	
Belief in knowledge/science	3	
Appreciation	6	
Teamwork	1	
Enjoyment	1	

Note: Some teachers expressed more than one opinion.

Some of the teachers' views on the sources of motivation for professional development are as follows:

(P1): "My source of motivation is generally the idea that if I am doing a job, I should do the best. If others can do it, why can't I do it? The expectations of my students also push me to learn and improve myself."

(P3): "Curiosity and my desire to know are the main things that motivate me. I also think that my desire not to stay away from current developments is also a big factor. My students are one of my biggest sources of motivation."

(P9): "Being appreciated. For example, in the previous years, I had a teacher profile that was pushed around a lot. In recent years, especially after I met eTwinning, my supervisors and my fellow teachers appreciated and encouraged me. This was motivation for me."

(P15): "The fact that the people around me support me and sometimes congratulate me, appreciate me, share my happiness and make me think that I am useful motivates me."

Environment Supports Learning

Regarding the eighth sub-question of the research, the participants were asked the question "What do you think about your environment supporting your learning?" and the answers were analysed. All of the participant teachers stated that their families had positive support. In addition, it was found that there were colleagues, administrators and friends who supported teachers' learning as well as those who tried to prevent it. The themes/codes and frequency values related to the answers given by the teachers are shown in Table 9.

Tablo 9

Environment supports learning

Themes/Codes	
Supporting	f
Family	16
Colleagues	7
Friends	8
Managers	7
Trying to Stop	f
Colleagues	6
Friends	2
Managers	4

Note: Some teachers expressed more than one opinion.

Some of the teachers' opinions about their environment supporting their learning are as follows:

(P4): "People around me generally support my learning in a positive way. When they see that I gain new knowledge and skills and transfer them to my students, I get positive reactions from my whole environment."

(P11): "Thanks to them, teachers and administrators in my close environment support me. There is an unlimited cheque from my family, and I thank them for this."

(P13): "I don't think that my environment gives me enough support. My family supports me, but I don't think that my colleagues and friends support me. My colleagues and school administrators have even said that the training I received was unnecessary."

(P10):" My family, my wife, my children are very supportive. Our provincial directorate also supports all our teachers in this regard, but I have never received any support from my school administration."

Discussion, Conclusion & Suggestions

This study, which aims to determine the views of teachers on the professional development experiences of selflearning teachers who attach importance to their professional development, was conducted with 16 participant teachers. Conclusions, discussions and suggestions regarding the findings obtained in the study are given below.

It is seen that teachers participate in many different activities for their professional development. Participating in different professional development activities contributes to the development of different professional skills (Kwakman, 2003). It was observed that the majority of the teachers participated in in-service trainings conducted by the Ministry of National Education remotely or face-to-face. It is thought that the successful studies and investments made by the ministry on in-service trainings and professional development studies in recent years have an effect on this. According to the findings of the research conducted by Katman and Tutkun (2015), in-service trainings increase teachers' professional knowledge and skills. Teachers' participation in in-service training activities can be seen as an indicator of the importance they attach to their professional development in a world where change is rapid. The fact that the Ministry of National Education makes in-service trainings compulsory also directs teachers to this source (Bayrakci, 2009). In addition, social media, scientific publications and books are also among the sources that teachers use for professional development. Social media has become indispensable in our lives in recent years with the widespread use of smart phones. In the findings of other studies, it was emphasised that teachers frequently use social media and other internet tools (Sardaş & Deniz, 2018). Teachers and school administrators frequently use social media and can easily access the content presented on the internet (Özmen et al., 2011). In the study conducted by Abakah (2023), it was found that teachers frequently used informal activities for their professional development. The use of scientific publications and books for professional development also shows the importance teachers attach to primary sources of knowledge. Academic readings are very important as they enable teachers to follow the developments affecting their professional fields and to keep up to date (Kwakman 2003; as cited in Eroğlu & Özbek, 2020). Today, information resources are more easily accessible than ever before. Teachers who feel responsible for their own learning can manage their own learning processes and can easily provide their professional development.

The main activities that teachers have participated in are branch/field trainings and national/international project writing trainings. Autodidactic teachers follow the developments related to their branches and attach importance to their development in this direction. In each branch, there are various skills that teachers need to develop specific to themselves (Sardaş & Deniz, 2018). The development of these skills is a factor that will directly affect student

success. In recent years, it is seen that projects such as eTwinning and erasmus are frequently implemented in schools, and the widespread use of these applications makes it necessary for teachers to receive training in project writing. According to the research findings, it is seen that autodidactic teachers give due importance to their development in this field. Such projects contribute to students' 21st century skills such as communication, creative thinking, entrepreneurship and working in cooperation (Karataş & Öztay, 2023). It also provides teachers with learning opportunities in the use of information and communication technologies (Vuorikari et al., 2011).

When the reasons why autodidactic teachers felt the need for professional development were analysed, it was found that the majority of the teachers did not consider their current training sufficient. Pre-professional trainings are not sufficient and lose their validity very quickly in today's world where change and transformation are very fast. At the same time, people may encounter various problems that they cannot solve with the skills they gained in their preservice education (Başaran, 1966; as cited in Güney, 2018). For this reason, teachers do not consider their pre-service training sufficient and seek various professional development. Teachers see technological changes as another reason for feeling the need for professional development. Especially in the last decade, innovations in the field of technology have caused changes in many areas of our lives. Schools, which should be the pioneers of change and transformation, are expected to keep pace with these changes. This change and transformation also imposes various responsibilities on teachers. Teachers are recognised as change agents in today's society (Bourn, 2015). Therefore, teachers should include technology in their teaching processes, develop their own technological adaptation and try to develop various methods to keep the comprehension levels of students who try to find a place for themselves in this new system high (Kır Elitaş & Sönmez, 2022). As a matter of fact, autodidactic teachers do not remain insensitive to this situation and feel the need for development in technology and refer to various resources. Teachers stated that another reason for feeling professional development is the change in the student profile and being efficient for students. Every practice in schools should put students at the centre. Because the purpose of existence of schools is students. The student profile is constantly changing and the expectations of students from schools are also changing. The change in student profile forms the basis of teachers' professional development needs (Odabasi & Kabakci, 2007). Teachers also feel the need for professional development in order to be productive for students and participate in various activities.

Considering how long autodidactic teachers have been learning teachers, it was found that the majority of the teachers have been learning teachers since they started their profession. Continuous professional development is necessary and important for every profession. However, it is more important for the teaching profession. Because one of the most important variables in determining teacher quality is professional development. Through continuous professional development, teachers can make their field knowledge more qualified, follow the developments in their field and bring their skills to the appropriate level with the desired conditions in the institutions where they work (Reese, 2010). In order to be effective and efficient teachers, teachers need to be open to learning and continue this learning. Because the teaching profession requires continuously following all innovations and changes in the world and reflecting the knowledge, skills, experience and understanding gained from them to the learning-teaching processes in the classroom (Özdemir, 2016). When we look at the factors that mobilise teachers in learning, sense of

curiosity, efficient lesson teaching, changes and transformations in the world and the pleasure of learning are among the main findings of this research. Teachers are always in search of efficient lesson teaching and try to learn new things. It is seen that autodidactic teachers also have a sense of curiosity and enjoy learning. Curiosity is a motivating factor in the learning process. When the characteristics of individuals who attach importance to continuous development are investigated, it is seen that curiosity features come to the fore (Diker Coşkun & Demirel, 2012). Considering that an individual will not continue a job that he/she does not enjoy, enjoying learning is an important element in the fulfilment of continuous learning. Because while learning for necessity is limited to knowing the desired amount, learning done with pleasure will make the individual more open to development and learning.

When the findings related to the reasons for attending in-service trainings within the Ministry of National Education are analysed, it is seen that autodidactic teachers participate in these activities for their professional and personal development. In addition to this, it is also seen that teachers participate in these trainings, albeit to a lesser extent, because the trainings are compulsory and a certificate is given at the end of the training. It is a necessity for teachers working in schools, which are the centre of development, to improve themselves. The easiest way to achieve this is through well-structured in-service training programmes. (Yilmaz & Esen, 2015). In recent years, the Ministry of National Education has been giving the necessary importance to both school-based professional development activities and distance in-service training activities, creating new platforms and providing teachers with plenty of opportunities. It is seen that autodidactic teachers also make use of these resources for their professional development.

Regarding the changes that autodidactic teachers felt after the trainings, it is seen that they reported that their lessons were productive, they realised that there were many things they did not know and needed to learn, and their self-confidence and motivation increased. Since it is among the findings of this research that teachers feel the need for professional development and that they express their opinions about being productive for their students as one of the factors that mobilise them to learn, the fact that teachers state that their lessons are productive after the training they receive shows that the teachers' goals are realised. One of the important factors affecting the efficiency expected from teachers, who have an important place in the healthy and effective continuation of the education and training process, is the motivation of the teacher (Tas, 2022). Teachers emphasised that their motivation increased after the trainings. Professional learning contributes to teachers' motivation by increasing their self-efficacy (Senge, 2014). Along with motivation, self-confidence also affects the efficiency of the teacher. A teacher with high motivation and self-confidence can serve the aims of education and school. It can be said that the fact that teachers feel that their motivation and self-confidence levels have increased as a result of the training they receive for their development causes an indirect effect on the quality of education and training through professional development activities. Because high motivation levels of teachers have a direct effect on the service quality of education (Yavuz & Karadeniz, 2009). Likewise, teachers' self-confidence will increase the quality of education and training services. Teachers' having a sense of self-confidence increases professional competence and also contributes to the formation of students' self-confidence (Pajares, 2005; as cited in Uysal & Gürol, 2018). In addition to these, teachers stated that they realised how much they did not know after the training they received. Realising the unknown will push teachers to new learning and contribute more to their development. This will increase the quality of education.

In addition to learning activities related to their profession, autodidactic teachers also participate in various learning activities on handicrafts, sports, culinary work, use of technology, difficulties encountered in everyday life. Teachers learn these mostly through social media, professional courses and experts. Especially with the widespread use of smart phones and technological devices, many activities can be followed on social media platforms and people can easily obtain learning opportunities in line with their needs and interests. Again, public education centres, municipalities and private courses have been providing education services in many fields in recent years, and people can access these courses and get training and have the opportunity to develop in the fields they want.

When the motivation sources of autodidactic teachers for professional development are analysed, it is seen that student expectations and appreciation come to the fore. Economic, cultural, political changes in society and scientific and technological changes also change the student profile and students' expectations from education (Avc1 & Durmuscelebi, 2014). Students' expectations also force teachers to improve themselves. After participating in professional development activities, teachers feel that they can overcome difficulties and feel competent in responding to student expectations, which encourages participation in professional development activities. In fact, the basis of professional development is to improve students. As a matter of fact, professional development of teachers is defined as activities organised to develop professional knowledge, skills and attitudes for the advancement of students (Guskey 2000; as cited in Bümen & Uslu, 2020). According to the findings of the research, being appreciated, which is one of the leading motivation sources in the professional development of teachers, is one of the important motivation sources of individuals not only in the professional development process but also in many other areas. As a matter of fact, being respected in Maslow's hierarchy of needs includes the need to show oneself. People show interest in needs such as recognition, having social position and status, achieving success, being appreciated and being respected after meeting their physiological, security and love needs respectively (Yeşil, 2016). Teachers also care about being appreciated and respected in their professional lives, and it is seen that they participate in professional development activities in order to be recognised and appreciated as a successful teacher. In the findings of a study conducted by Drage (2010), the sources of motivation of teachers for professional development are listed as individual needs, support of colleagues and environment, commitment to lifelong learning, reward system at school, support of school principal, encouragement of family and friends.

All of the autodidactic teachers stated that their families supported their learning in terms of their environment's support for their learning. In addition, the number of those who stated that their close circle of friends supported their learning is in the majority, while the number of those who stated that their colleagues and administrators did not support them but tried to prevent them from learning is at a considerable level. Drage (2010) emphasised that one of the factors that motivate teachers for professional development is the encouragement they receive from their family and friends. Family and friends should encourage and facilitate the teacher's participation in various activities for development. When the responsibilities of the teacher in his/her life other than his/her profession are considered, his/her responsibilities towards his/her family come first. In the professional development process, the teacher will

have to allocate time for his/her development by cutting the time he/she will spend with his/her family. Therefore, without the support of the family, the number of activities that the teacher can participate in for his/her development will be limited. On the other hand, the support of colleagues and administrators is also important in the professional development of teachers. In particular, school administrators should motivate teachers for professional development both as role models and by providing various supports (Cayak, 2022). School administrators may perceive the fact that teachers' classes will be empty during the trainings they will attend and that the work in the school will seem to be disrupted as a problem. However, teachers who participate in professional development activities will contribute much more to the school in the long run. It is thought that the reason why teachers are not supported by their colleagues in terms of professional development and they try to prevent teachers from participating in professional development activities may be the comparison between teachers by others and the feeling of jealousy. However, teachers who attach importance to professional development activities and participate in various activities will be able to provide professional guidance to other colleagues in the school and make various contributions to their development. According to the findings of the research conducted by the National Foundation for Educational Resarch (NFER) in 2010, which aimed to determine which factors are motivating in the professional development of teachers, teachers stated that the first-hand support provided by colleagues and school administrators was effective in their development. According to the results of the same study, teachers emphasised that they could not find enough time due to the intensity of their lessons and that this was an obstacle for their development (Cayak, 2022). Both family and close friends, school administrators and other teachers should be aware of the fact that qualified education and training activities can be fulfilled by teachers who constantly develop and renew themselves according to the requirements of the age. Qualified teachers and qualified teaching can only be possible with the existence of continuous support for teachers (Seferoğlu, 2004). Therefore, it should not be forgotten that all stakeholders of education should provide various opportunities and incentives for professional development in order for teachers to improve themselves and become better equipped.

In the light of the findings of this research, it is possible to make various suggestions regarding the professional development of teachers. These suggestions are given below:

- Teachers mostly benefit from distance and face-to-face in-service training activities of the Ministry of National Education in terms of professional development. Therefore, ministry-level trainings should be diversified and made continuous in line with the needs of teachers by asking teachers.
- Due to the widespread use of social media in recent years, social media should be used effectively by the Ministry of National Education in professional development issues and professional development activities should be included more in these channels..
- Teachers constantly need development in their branches/fields and follow the trainings in this field. Therefore, branch-specific trainings should be diversified and made widespread by the ministry.
- Since teachers do not consider their current pre-service training sufficient, professional development activities should be given due importance from the first years of the profession, and face-to-face and distance education opportunities should be continuously made available to teachers based on the

philosophy of lifelong learning.

- In our world of rapid technological developments, all teachers need support in the use of technology. Therefore, teachers should be provided with easy access to trainings on this subject by authorised institutions. In addition, technological equipment in schools should be constantly renewed in accordance with the requirements of the age.
- Considering that the most important priorities of teachers in terms of professional development are to meet student expectations and to teach efficient lessons, trainings on teaching methods and techniques that will increase lesson efficiency should be included.
- For the development of teachers, graduate education should be given due importance and encouraged, and training activities should be organised in cooperation with universities.
- It is necessary to give the necessary importance to the promotion of the Presidential Communication Office Distance Education Gateway and make its use widespread.
- Awareness raising activities should be carried out on the necessity and importance of professional development and teachers' participation in professional development activities should be encouraged with rewards, service points, etc.
- The number of activities that teachers can participate in related to their personal development as well as professional development should be increased and diversified. Personal development courses should be organised for teachers during summer holidays.
- It should not be forgotten that qualified education can be provided by qualified teachers, and the participation of teachers in professional development activities should be supported by administrators, colleagues, friends and family.
- If teachers want to be effective and efficient in their profession, they should be open to professional development and participate in professional development activities frequently.

Ethic

I declare that the research was condukted with the ethical standards of the institutional and national research committee, following the 1964 Helsinki Declaration and its later amendments, or comparable ethical standards.. Informed consent was obtained from all individual participants included in the study.

Author Contributions

This article was jointly writtenby two authors.

Conflict of Interest

The outhors declare that they have no conflicts of interest.

Funding

No scholarships or payments have been received from any institution for this article.

References

- Abakah, E. (2023). Teacher learning from continuing professional development (CPD) participation: A sociocultural perspective. *International Journal of Educational Research Open*, 4. https://doi.org/10.1016/J.IJEDRO.2023.100242
- Arslan, E. (2022). Nitel araştırmalarda geçerlik ve güvenirlik [Validity and reliability in qualitative research]. *Pamukkale University Journal of Social Sciences Institute*, 51(1), 395–407. https://doi.org/10.30794/pausbed.1116878
- Atal, D., & Sancar, R. (2021). Öğretmenlerin mesleki gelişimlerine odaklanan araştırmalar ne söylüyor? [What does research focusing on teachers' professional development say?]. Erzincan Üniversitesi Eğitim Fakültesi Dergisi, 23(1), 166–186. https://doi.org/10.17556/erziefd
- Avcı, Ö. Y., & Durmuşçelebi, M. (2014). Öğretmen görüşlerine göre ideal öğrenci tipi [Ideal student type according to teachers' views]. *Türkiye Sosyal Politika ve Çalışma Hayatı Araştırmaları Dergisi*, 4(6), 22–44.
- Bayrakcı, M. (2009). In-service teacher training in Japan and Türkiye: A comparative analysis of institutions and practices. *Australian Journal of Teacher Education*, *34*(1), 10–22.
- Bayram, T. (2023). Sınıf öğretmeni adaylarının acil uzaktan eğitim sürecindeki yaşam boyu öğrenme eğilimleri ve öz-yönetimli öğrenme becerilerinin incelenmesi [Investigation of lifelong learning dispositions and self-managed learning skills of classroom teacher candidates in emergency distance education process] [Master's Thesis]. Kastamonu University.
- Bourn, D. (2015). Teachers as agents of social change. *International Journal of Development Education and Global Learning*, 7(3), 63–77.
- Bümen, N. T., & Uslu, Ö. (2020). Öğretmenlerin mesleki gelişiminde beklenti-değer-bedel ölçeğinin Türkçeye uyarlanması [Adaptation of expectation-value-cost scale in teachers' professional development into Turkish]. *Gefad/Gujgef*, 40(3), 905–942.
- Can, E. (2019). Öğretmenlerin meslekî gelişimleri: engeller ve öneriler [Professional development of teachers: obstacles and suggestions]. *Journal of Qualitative Research in Education*, 7(4), 1–33. https://doi.org/10.14689/issn.2148-2624.1.7c.4s.14m
- Çayak, S. (2022). Öğretmenlerin mesleki gelişimlerinde okul müdürlerinin rolü [The role of school principals in teachers' professional development]. In A. S. Akdemir (Ed.), *Eğitim Bilimleri Alanında Uluslararası Araştırmalar XIII* (pp. 123–139). Eğitim Yayınevi.
- Creswell, J. W. (2016). 30 Essential Skills for The Qualitative Researcher.
- Creswell, J. W. (2021). Nitel araştırma yöntemleri beş yaklaşıma göre nitel araştırma ve araştırma deseni [Qualitative research methods qualitative research and research design according to five approaches] (S. B. Demir & M. Bütün, Eds.; 6. Baskı). Siyasal Kitabevi. https://ws1.turcademy.com/ww/webviewer.php?doc=82108

- Diker Coşkun, Y., & Demirel, M. (2012). Üniversite öğrencilerinin yaşam boyu öğrenme eğilimleri [Lifelong learning tendencies of university students]. *Journal of Education*), *42*, 108–120.
- Drage, K. (2010). Professional development: Implicationsfor Illinois careertechnicaleducataionteachers. Journal of Careerand Technical Education, 25(2), 27–37.
- Ekinci, E. (2015). Sınıf Öğretmenlerinin mesleki gelişime ilişkin görüşleri (Mesleki Gelişim Modeli Önerisi) [Classroom teachers' views on professional development (Professional Development Model Proposal)] [Master's Thesis]. Düzce University.
- Erdem, A. R., & Şimşek, S. (2013). Öğretmenlere ve okul yöneticilerine verilen hizmet içi eğitimlerin irdelenmesi [Analysing in-service trainings given to teachers and school administrators]. Uşak Üniversitesi Sosyal Bilimler Dergisi, 6(4), 94–108.
- Eroğlu, M., & Özbek, R. (2020). Etkili öğretmenlerin mesleki gelişimi [Professional development of effective teachers]. Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi, 37, 73–92. https://doi.org/10.14582/duzgef.2020.142
- Gaible, E., & Burns, M. (2005). Using technology to train teachers: Appropriate uses of ict for teacher professional development in developing countries. https://files.eric.ed.gov/fulltext/ED496514.pdf
- Gebel, S., & Bozkurt, T. (2021). Öğretmenlerin Milli Eğitim Bakanlığı tarafından yürütülen uzaktan hizmet içi eğitim faaliyetleri hakkındaki görüşleri [Teachers' views on distance in-service training activities conducted by the Ministry of National Education]. *Gaziantep Üniversitesi Eğitim Bilimleri Dergisi*, 6(1), 42–62. https://dergipark.org.tr/tr/download/article-file/2028220
- Guglielmino, P. J., & Guglielmino, L. M. (2001). Moving toward a distributed learning model based on selfmanaged learning. S.A.M. Advanced Management Journal, 66(3), 36–43.
- Güney, B. (2018). Sınıf öğretmenlerinin hizmetiçi eğitim programlarına ilişkin görüşleri (Mardin İli Midyat İlçesi Örneği) [classroom teachers' opinions on in-service training programmes (The Case of Mardin Province Midyat District)] [Master's Thesis]. İnönü University.
- Guskey, T. R. (2003). What makes professional development effective?. Phi Delta Kappan, 84(10), 748-750.
- Karagöz, G. (2003). Eğitimde yansımalar:VII. çağdaş eğitim sistemlerinde öğretmen yetiştirme ulusal sempozyumu kitabı [Reflections in education: VII. national symposium on teacher training in contemporary education systems]. Sivas Cumhuriyet University.
- Karataş, F. R., & Öztay, E. S. (2023). Öğretmen ve öğrencilerin eTwinning proje uygulamalarına ilişkin görüşleri [Teachers' and students' views on eTwinning project applications]. *IBAD Sosyal Bilimler Dergisi*, 1(14), 105– 120. https://doi.org/10.21733/ibad.1190441

- Katman, A. K., & Tutkun, Ö. F. (2015). Teachers' views related to the effectiveness of in-service training programs in primary schools. *Procedia - Social and Behavioral Sciences*, 174(2015), 1878–1885. https://doi.org/10.1016/j.sbspro.2015.01.851
- Kır Elitaş, S., & Sönmez, M. F. (2022). Dijitalleşme sürecinde değişen eğitim pratikleri ve bu değişimin taraflara etkisi [Changing educational practices in the digitalisation process and the effects of this change on the parties]. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 1(49), 333–344. https://doi.org/10.52642/susbed.1162588
- Kızılkaya, H. (2012). Öğretmenlerin mesleki gelişimlerinin mesleki gelişime yönelik tutumları ve iş doyumları bakımından incelenmesi üzerine bir araştırma [A Study on the investigation of teachers' professional development in terms of their attitudes towards professional development and job satisfaction] [Master's Thesis]. Kırıkkale University.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149–170.
- MEB. (2009). Türkiye hayat boyu öğrenme strateji belgesi ve eylem planı [Türkiye lifelong learning strategy document and action plan]. Milli Eğitim Bakanlığı.
- Odabaşı, F., & Kabakçı, I. (2007). Öğretmenlerin mesleki gelişimlerinde bilgi ve iletişim teknolojileri [Information and communication technologies in teachers' professional development]. Uluslararası Öğretmen Yetiştirme Politikaları ve Sorunları Sempozyumu. Baku, Azerbaycan
- Özdemir, S. M. (2016). Öğretmen niteliğinin bir göstergesi olarak sürekli mesleki gelişim [Continuous professional development as an indicator of teacher quality]. *GaziEğitim Bilimleri Dergisi*, 2(3), 233–244.
- Özmen, F., Aküzüm, C., & Sünkür, M. (2011). Sosyal ağ sitelerinin eğitsel ortamlardaki işlevselliği [Functionality of social networking sites in educational settings]. *E-Journal of New World Sciences Academy*, 7(2), 496–506.
- Özoğlu, M. (2010). Türkiye'de öğretmen yetiştirme sisteminin sorunları [Problems of teacher training system in Türkiye]. Siyaset, Ekonomi ve Toplum Araştırmaları Vakfi (SETA) Analiz, 17, 1–40. https://www.academia.edu/1358721/T%C3%BCrkiyede_%C3%96%C4%9Fretmen_Yeti%C5%9Ftirme_Sistemi nin Sorunlar%C4%B1
- Recepoğlu, S. (2021). Sosyal bilgiler öğretmen adaylarının yaşam boyu öğrenme eğilimleri ile öz-yönetimli öğrenme becerileri arasındaki ilişkinin incelenmesi [Investigating the relationship between lifelong learning dispositions and self-directed learning skills of pre-service social studies teachers]. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 41(1), 551–569.
- Reese, S. (2010). Bringing effective professional techniques. *Echniques: Connecting Education and Careers*, 85(6), 38–43.
- Şahin, E., & Erden, M. (2009). Özyönetimli öğrenmeye hazırbulunuşluk ölçeğinin geçerlik ve güvenirlik çalışması [Validity and reliability study of self-directed learning readiness scale]. *E-Journal of New World Sciences Academy*, 4(1), 695–706.

- Şahin, F., Çaka, C., Dulkadir Yaman, N., Ferhan Odabaşi, H., & Kuzu, A. (2016). Mesleki gelişim ve araştırma toplulukları bağlamında bir model önerisi [A model proposal in the context of professional development and research communities]. Sakarya Üniversitesi Eğitim Fakültesi Dergisi, 31, 128–151.
- Saridaş, G., & Deniz, L. (2018). Çevrimiçi öğrenme topluluklarının öğretmenlerin mesleki gelişimlerine etkisine yönelik öğretmen görüşleri [Teachers' views on the effect of online learning communities on teachers' professional development]. *Çağdaş Yönetim Bilimleri Dergisi*, 5(1), 11–41.
- Seferoğlu, S. S. (2004). Öğretmen yeterlilikleri ve meslekî gelişim [Teacher competences and professional development]. Bilim ve Aklın Aydınlığında Eğitim, 58, 40–45.
- Senge, P. (2014). Öğrenen okullar [Schools That Learn] . Nobel Akademik Yayıcılık.
- Taş, H. (2022). Öğretmenlerin motivasyon düzeylerinin incelenmesi (Çal İlçe Örneği) [Investigation of teachers' motivation levels (Çal District Example)] [Master's Thesis]. Denizli Pamukkale University.
- Taşlıbeyaz, E., Karaman, S., & Göktaş, Y. (2014). Öğretmenlerin uzaktan hizmet içi eğitim deneyimlerinin incelenmesi [Investigation of teachers' distance in-service training experiences]. Ege Eğitim Dergisi, 15(1), 139– 160. https://dergipark.org.tr/tr/download/article-file/57171
- Tekkol, İ. A., & Demirel, M. (2016). Öğretmen adaylarının öz-yönetimli öğrenme becerilerine ilişkin görüşlerinin incelenmesi [Examining pre-service teachers' views on self-directed learning skills]. Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi, 6(12), 151–168.
- Toprak, M., & Erdogan, A. (2012). Yaşamboyu öğrenme: kavram, politika, araçlar ve uygulama [Lifelong learning: concept, policy, tools and practice]. *Journal of Higher Education and Science*, 2(2), 69. https://doi.org/10.5961/jhes.2012.036
- Towle, A., & Cottrell, D. (1996). Self directed learning. In *Archives of Disease in Childhood* (Vol. 74, Issue 4, pp. 357–359). BMJ Publishing Group. https://doi.org/10.1136/adc.74.4.357
- Tutar, H., & Erdem, A. T. (2022). Örnekleriyle bilimsel araştırma yöntemleri ve spss uygulamaları [Scientific research methods and SPSS applications with examples] (2. Baskı). Seçkin Publishing. https://ws1.turcademy.com/ww/webviewer.php?doc=104196
- Uştu, H., Taş, A. M., & Sever, B. (2016). Öğretmenlerin mesleki gelişime yönelik algılarına ilişkin nitel bir araştırma [A qualitative study on teachers' perceptions of professional development]. *Elektronik Mesleki Gelişim ve Araştırma Dergisi*, 4(1), 82–106. https://dergipark.org.tr/tr/download/article-file/226939
- Uysal, A., & Gürol, M. (2018). Development of social studies teachers' self-confidence for teaching scale . International Journal of Field Education, 4(2), 70–82. https://orcid.org/0000-0001-9006-5876
- Uzundiz, T. N. (2022). Öğretmen adaylarının transaksiyonel uzaklık algıları ve öz yönetimli öğrenme becerileri arasındaki ilişkinin incelenmesi [Investigation of the relationship between preservice teachers' perceptions of transactional distance and self-managed learning skills] [Master's Thesis]. Sakarya University.

- Vuorikari, R., Gilleran, A., & Scimeca, S. (2011). Growing beyond Innovators ICT-Based School Collaboration in eTwinning. 537–542.
- Yağar, F., & Dökme, S. (2018). Niteliksel araştırmaların planlanması: Araştırma soruları, örneklem seçimi, geçerlik ve güvenirlik [Planning of qualitative research: Research questions, sample selection, validity and reliability]. *Gazi Sağlık Bilimleri Dergisi*, 3(3), 1–9.
- Yavuz, C., & Karadeniz, C. B. (2009). Sınıf öğretmenlerinin motivasyonunun tatmin üzerine etkisi [The effect of classroom teachers' motivation on satisfaction]. Uluslararası Sosyal Aratırmalar Dergisi The Journal of International Social Research, 2(9).
- Yazıcı, A. Ş. (2020). Okul müdürlerinin mesleki profesyonellikleri ile yaşam boyu öğrenme eğilimleri : Bir karma yöntem çalışması [Professional professionalism and lifelong learning tendencies of school principals : A mixed method study] [Doctoral Thesis]. Adnan Menderes University.
- Yeşil, A. (2016). Liderlik ve motivasyon teorilerine yönelik kavramsal bir inceleme [A conceptual review of leadership and motivation theories]. *Uluslararası Akademik Yönetim Bilimleri Dergisi*, 2(3), 158–180.
- Yilmaz, H. Y., & Esen, D. G. (2015). An investigation on in-service trainings of the ministry of national education (MONE). *Procedia Social and Behavioral Sciences*, 186(2015), 79–86. https://doi.org/10.1016/j.sbspro.2015.04.019
- Yin, R. (2011). Qualitative Research from Start to Finish. The Guilford Press.
- Yıldırım, A., & Şimşek, H. (2008). Sosyal bilimlerde nitel araştırma yöntemleri [Qualitative research methods in social sciences]. Seçkin Publishing.
- Yıldırım, A., & Şimşek, H. (2021). Sosyal bilimlerde nitel araştırma yöntemleri [Qualitative research methods in social sciences] (12. Baskı). Seçkin Publishing. https://ws1.turcademy.com/ww/webviewer.php?doc=92932
- Yurdakul, I. K. (2013). Öğretmenlikte mesleki gelişim [Professional development in teaching]. Anadolu University Açıköğretim Yayınları.