

Activity-Based Teaching with Social Studies Pre-Service Teachers for Developing the Thinking Skills of Learners

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Abstract

In this study, by helping social studies pre-service teachers develop activities for thinking skills, it was aimed to explore the effects of such activities in the context of professional competencies. The research was designed as action research. The action research group included 31 pre-service teachers (16 women and 15 men). Semi-structured interviews were conducted in final meeting with 12 volunteering participants after the application was completed. The following findings were explored in detail as; in the context of professional development, skills, values, and professional competence dimensions; in the context of lesson planning and teaching processes, lesson planning, teaching processes, material use, and contributions to activity production; and, at the end of the implementation process, evaluations of the implementation process and personal development. As a result of the research it was determined that creative thinking, critical thinking, thinking from different perspectives, original thinking, reflective thinking, high-level thinking, problem solving, scientific thinking, analytical thinking, thoughtful thinking, empathetic thinking, objective thinking, aesthetic thinking, developing broad perspective, collaborative thinking, and questioning skills were developed in the skills dimension. In the dimension of value, values such as justice, empathy, patriotism, austerity, respect, trust, self-confidence, solidarity, diligence and responsibility were developed. When the general results are evaluated, it was revealed that the pre-services improved their professional competencies in terms of lesson planning, implementation, activity development, material use, and pedagogical aspects. In order to ensure that the professional needs and competencies of pre-service teachers are met and supported, institutional educational programs that train teachers should undergo curriculum updates with the addition of the necessary theoretical and practical information to implement activity-based teaching in it successfully.

Keywords: Thinking Skills, Activity-Based Teaching, Social Studies, Pre-Service Teachers

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INTRODUCTION

Experienced teachers are valuable human sources that can provide solutions for the most difficult teaching challenges. Even if all resources are sufficient in education and training, it is still very difficult to achieve high quality of success without experience. Main focus of many education teams is the teacher, who coordinates and manages the educational situation. The situations such as exposure of the ideas, the creation of the inspirational teaching environments, the conditions that push students to think, and the complex situations related to learning are always influenced by the teacher's experience.

It is a common belief that the teachers in charge of realizing current educational outcomes should be qualified teachers by enjoying the support of country authorities at the point reached today. For this reason, the pressure has been developed to provide quality in teacher training. It is foreseen that it will be possible to contribute to student success through more effective education in teacher education, especially with the increase in professional development quality (Sonmark, Révai, Gottschalk, Deligiannidi, & Burns, 2017). According to Singer, Murphy, Hines and The Hofstra New Teachers Network (2003), the stereotype, that philosophers were conceived of as wise people, comes from the view that philosophers have disconnected from their surroundings and plunged into their own world of thought. In a sense, everyone is a philosopher and everyone has a philosophy that guides their beliefs and actions. From the perspective of the teacher, it can be stated that each teacher has an educational philosophy that shapes the way of teaching and that this philosophy is based on a belief in life, learning and an understanding how to achieve it.

Qualified teacher education includes the 21st century skills (creativity, critical thinking, problem solving, cooperation, communication etc.) at different levels in many OECD countries. Contemporary new demands require teachers to switch from traditional to innovative methods. Therefore, updating teachers' skills through teacher training institutions is one of the main problems. (Sonmark et al., 2017).

Especially, teachers are expected to become experts in the ability to "translate" the topics they teach, into appropriate learning methods and using to different topics. In this sense, it is important to carry out the necessary curriculum and application studies so that teachers have the ability to combine approaches, a rich repertoire of teaching strategies and how and when to use them (Schleicher, 2012 Cited in Kennedy, Latham, & Jacinto, 2016: 14).

All skills can be developed in educational settings. The important thing is that the teacher use the appropriate strategy, method, and technique. It is the teaching facilitating the students to mobilize, to enable them to think, analyze, discuss and execute ideas, to work in collaboration with a planned and sharing manner. In addition to this, the skills in the curriculum should be handled with precision in a way related to the acquisitions, should be supported with daily life and subjects that will attract the attention of the students (Baysal, Çarıkçı, & Yaşar, 2016). After all, the teacher is only responsible for a learning process that does not just focus on delivering material to the student. The students should discover and construct the information, process complex information and be responsible for learning outcomes actively involved in learning (Triswahyono, Sukartiningsih, & Harmanto, 2019). It is a requirement that textbooks should be prepared with logic supporting these mechanisms and they should be designed to contribute to the development of research, inquiry and critical thinking skills (Aladağ & Karaman, 2018).

Social studies teachers who want to teach their thinking skills need to organize discussions in a small or large group, add many types of writing activities to their daily classroom routines, and add their teaching activities to their routines, from simple recallment questions to the memory and high-level questions (Karabulut, 2012). For example, creatively solving any problem, providing a unique perspective for potential solutions requires the ability to think critically; teachers should take responsibility for this process (Changwong, Sukkamart, & Sisan, 2018). It is necessary to spend time

and effort on critical thinking in order to prepare students who will act in the public interest and to raise the citizens who will be able to make decisions and solve problems using reflective thinking (Wilén & Phillips, 1995).

Education and training are inherently connected. This process is aimed at acquiring the various competencies and skills necessary for any citizen to seize good employment opportunities and have a positive impact on society. Activity-supported practices are defined as a system in which students actively participate in the learning experience instead of sitting in line as passive listeners (Anwer, 2019). In learning sessions in classrooms where traditional teaching is based, the main physical task performed by students is to take notes or sit down to answer any queries of the teacher. It is very difficult for students to express themselves actively in this way and they become passive learners. This makes the learning procedure dull and dry. It does not provide educators and students a space for any movement. Another disadvantage of this technique is that students with learning problems cannot adjust the way courses are delivered (Noreen & Rana, 2019). By overcoming these kinds of problems to make contemporary teaching, The Activity-Based Teaching (ABT) has been developed as a learning approach that supports active participation of students in learning theories or concepts through applied experiences in educational campuses and in many learning environments (Priyono, Wena, & Rahardjo, 2017).

Social studies lesson is full of activities that actively involve student thinking. For example, to identify and compare geographic regions by using maps, to apply constitutional rights concepts in certain situations, or to guess the changes in prices using the principles of supply and economic demand. Many of these or other similar topics include outcomes that are very suitable for thinking activities within the learning area. In order for students to be productive in responding to the intellectual tasks they face, they need competence in both general problem solving and thinking about specific types of intellectual tasks (Solomon, 1987). Including the concept of thinking within the skills in the social studies curriculum; critical thinking and innovative thinking are emphasized. In the special objectives of the programme, items such as “having critical thinking skills as individuals who know the ways of reaching correct and reliable information”, “having access to information based on scientific thinking, observing scientific ethics in using and producing information” are included (MEB, 2018). Among the issues that should be considered in the practice of the curriculum of the social studies lesson, the understanding of “social studies as social sciences” and “social studies as reflective thinking” should be given importance by making use of the events inside and outside the school and comparing the students should be compared real-life problems and contradictory situations, they should think reflectively for the problems they have. In addition, in the 9th article, the expression is that “current and controversial issues about acquisitions can be carried to the class by using different discussion techniques, by associating them with problem solving, critical thinking, using evidence, decision making and research skills”. Among the competencies; the highlighted concepts of mathematical competence and basic competencies in science/technology (logical and spatial thinking) are included as the third key competence. As for individual development and teaching; abstract thinking ability is included.

Purpose and Importance

Thinking is a complex process that takes place consciously in the mind, undergoes a series of processes for a purpose and progresses successively. Therefore, the teacher should have a good education (Baysal et al., 2016). Teacher education has a very important value in this context. The adequacy of teachers’ thinking skills is a very important requirement in their professional lives. Likewise being qualified with pre-vocational training on this subject and designing activities that develop these skills for students and leading all students to the practice affect the quality of education (Tok & Sevinç, 2010). In this process, teacher education institutions should increase their professional development opportunities, and they should ensure that their pre-service teachers graduate by fully taking the qualifications required by the profession (Seferoğlu, 2004).

The reforms, that have taken place due to some changes in today's world, point out that teachers should adapt to the changing their features and should not be left behind. This constantly and remarkably emphasizes personal and professional development culture as well as pedagogical issues. In order to make these demands workable, teachers are needed who are aware of and able to adapt to changing situations in the world (Buldu, 2014).

It is the teacher's responsibility to develop thinking skills thematically. Teachers need to identify some basic skills of learning and teaching, to adapt their teaching accordingly (Kusuma, Gunarhadi, & Riyadi, 2018). Social Studies offers a quite appropriate content and opportunity to close this gap. Based on these requirements, in this research, with social studies pre-service teachers were provided to develop activities for their thinking skills; it is aimed to investigate the effects of these activities in the context of professional competencies. In this context, the organization of social studies education with ABT, experiencing it with the production of activities, and the importance of appearing situations will be discussed in this work. At the same time it will be researched whether pedagogical studies on teaching students to gain thinking skills in social studies teaching provide comprehensive experience in pre-service teachers. In this context, the aim of the study will be evaluated primarily as the purpose, knowledge, skills, values, time, related outcomes, processes, and activity planning and practice stages; secondarily as the reflection of these features among pre-services in terms of student status; and finally as the overall contribution of the study from the dimension of vocational education.

In literature, there are some studies related to skills such as critical thinking (Akpınar & Kranda, 2018; Karaboğa, 2019; Aldan Karademir, 2013; Bilgin & Eldeleklioğlu, 2007; Kusuma, Gunarhadi, & Riyadi, 2018; Puspita & Aloysius, 2019; B), high level thinking (Çakır, 2013; Karakaya, 2012; Söylemez, 2018), creative thinking (Tok & Sevinç, 2010; Dikmen & Tuncer, 2018; Işık, 2012; Birgili, 2015), reflective thinking (Baş, 2013), questioning (Aldan Karademir, 2013; Aldan Karademir, Çaylı, & Deveci, 2019; İnel Ekici, 2017), analytical thinking (Çelik, Gürpınar, Başer, & Erdoğan, 2015), aesthetic thinking (Dolapçioğlu, Gürkan, & Karakuş, 2019; Özbal & Aydoğan, 2017), empathetic thinking (Çubukçu & Girmen, 2009). In ABT based literature, it is stated that reflective thinking skills have a positive relation with high level thinking skills and that reflective thinking way develops these skills (Ersözlü, 2008). Such activities provide a meaningful development in critical, reflective and attentive thinking skills (Biçer, 2019), creative thinking skills develop the students' successes of developing projects (Karataş & Özcan, 2010), there is a positive correlation between the teachers' activeness in their classroom activities and their self confidence in teaching thinking skills (Koç, 2020), activities motivate the critical thinking (Valdez, Lomoljo, Dumrang, & Didatar, 2015). Unlike these studies, there is no study about the thinking skills and teaching of the activities in social studies on pre-service teachers' vocational development in literature.

Accordingly, the following question is the main one for the research of current work: Can the professional competencies of pre-service teachers be strengthened with ABT to improve their thinking skills? In this framework, answers to the following additional questions were sought:

1- Which skill, value, and professional competence to make pre-service teachers gain thinking skills can be provided with ABT ?

2- Which competences from the dimensions of preparing lesson plan, making teaching process workable, using material, and producing activities can be provided in means of making pre-service teachers gain thinking skills with ABT?

METHOD

This research is planned as action research, which is one of the qualitative research methods. Think-do-think process of action research, in other words "action cycle" according to MacNaughton and Hughes (2009), proceeds according to the stages of choosing changes, planning for changes, creating change, and sharing change lessons. In this cycle; the processes of asking questions, meeting

with the action research family, conducting a literature review, ethical responsibilities, reflection and critical reflection, determining usefulness, planning difficulty and validity, creating a movement research group, and gathering basic data take place. This study is based on the action research model of MacNaughton and Hughes (2009), following steps represent the explanation and ABT practice process in this model.

In choosing change stage; Opportunities and topics that will transform into experience for change were analyzed. Conditions to create change were determined.

The subject of this project is to develop the professional competencies of the pre-service teachers of social studies to help them gain thinking skills.

Research question is that: Can the professional competencies of the pre-service teachers for developing their thinking skills be strengthened with ABT ?

In planning the change stage, The research has advanced with a collaborative approach among researchers and action research members. The related literature has been scanned. As the cycle progresses, there occurs a return to the literature periodically. The consent of the participants was obtained for the practice and the project. At various points; the project evaluation is done and the subject is re-examined. The working group and its scope have been held on to.

In creating change stage; Data were collected and analyzed. Data were collected three times, at the beginning, in the middle and at the end of the process. Data; The activities prepared together with the pre-service teachers; were gathered through recording, reporting, observation, and final meeting. From the social studies curriculum; achievements, skills, and values were determined and groups of 4 people were formed from the class lists and random lots were used to determine the weeks in which groups would apply to the activities. In the group where the research was conducted; There were 31 pre service teachers, 16 girls and 15 boys. The study was applied to the whole class. Semi-structured interviews as final meeting took place with 12 volunteer candidates selected from the groups after the implementation was completed. Examples of the distributed outcomes that will be reflected to the numbered groups from the social studies curriculum (MEB, 2018) on the ABT activities are given in table 1. Action working plan is given in table 2.

Table 1. Examples of thinking skills in the social studies education programme outcomes

Thinking skill	Sample outcome
Analysis	SS.6.5.5. Students will be able to analyse the place and the importance of qualified manpower on Turkey's economy SS.6.6.3. Students will be able to analyse the elements that affect the decision processes of the government.
Evaluation	SS.5.2.5. Students will be able to evaluate the historical development of cultural elements in daily life. SS.7.4.4. Students will be able to evaluate the contribution of free thought to scientific developments.
Association	SS.6.5.1. Students will be able to associate our country's sources with their economic practices. SS.7.6.3. Students will be able to associate the republic of Turkey's basic qualifications with the practices in social life.
Questioning	SS.6.1.3. Students will be able to question prejudices about differences to live in harmony with the society. SS.5.3.4. Students will be able to question the creation reasons of disasters and environmental problems in their environment.
Making Inference	SS.6.3.4. Students will be able to make inference about climate conditions by thinking about the lives of people from different natural environments in the world.
Comparison	SS.4.2.3. Students will be able to compare current plays with traditional ones in means of change and continuity. SS.6.6.1. Students will be able to compare different regimes in means of basic principles of democracy.
Developing idea	SS.4.4.4. Students will be able to develop some ideas about designing typical products by following the needs of their own surroundings. SS.7.7.4. Students will be able to develop ideas about the solutions for global problems with their friends.

Table 2. Action working plan

Process	Type of work	Data collection tools	Time period
Before implementation	Pre-interview	Observation	A week: 08-12 October, 2019
	Seminar	Interview	2 weeks: 15-26 October, 2019
	Determining the groups		A day: 31 October, 2019
	Determining outcomes, skills and values/ distributing them to the groups		A day: 01 November, 2019
Implementation process	Preparing lesson plan	Observation, report, video recording, assistant interviews	7 weeks: 05 November-21 December, 2019
	Preparing activities	Group reports	7 weeks: 05 November-21 December, 2019
	Implementation of prepared activities	Weekly coordinator reports	7 weeks: 05 November-21 December, 2019
After implementation	Final interview	Semi structured interview	A week: 24-28 December, 2019

Data Collection Tools

The data related to the research consist of interviews, observation, in-process evaluation, and final interview.

Examples of outcomes distributed to groups to be reflected in the ABT implementations are given in Table 3.

Table 3. Outcome examples related to teaching program

Class level	Learning domain	Outcome	Skill
4	Individual and Society	Students will be able to make new inferences about their personal identities by analyzing formal identity card.	Empathy
4	Science, Technology, and Society	Students will be able to develop some ideas about designing typical products by following the needs of their surroundings.	Innovativeness
5	Production, Distribution, and Consumption	Students will be able to develop new ideas related to production, distribution, and consumption by working in collaboration.	Innovativeness
6	Active citizenship	Students will be able to realize the value given to the women in social life by analyzing Turkish history and current examples.	Critical thinking
6	Global relations	Students will be able to analyze the economic relations between our country and the others.	Critical thinking
7	People, places and environments	Students will be able to give examples for the negative situations that can occur with the restriction of freedom of accommodation and travel which are among basic rights.	Problem solving
7	Global relations	Students will be able to develop ideas about the solutions for global problems with their friends.	Problem solving

The sub-problems of the research are consisted of the main categories of the interview questions. Interview questions and the main categories including these questions (sub-problems) are given in table 4.

Table 4. Interview questions and main categories

Main categories	Sub categories	Questions
Vocational development	Skill dimension	1- In which subjects did your practice improve from the skill dimension related to teaching thinking?
	Value dimension	2- In which subjects did your implementation make progress in terms of values related to teaching thinking?
	Vocational competence dimension	3- In which subjects did your implementation's professional competence dimension related to teaching thinking make progress?

	Lesson planning dimension	4- In which subjects did your implementation make progress in lesson plan preparation and activity development related to teaching of thinking?
Lesson planning and teaching process	Teaching process dimension	5- In which subjects did your implementation make progress in teaching process aspect of teaching thinking?
	Material using dimension	6- In which subjects did the implementation which was improved by the use of material related to teaching thinking make progress?
	Contribution dimension to activity production	7- In which subjects did your implementation make progress in the activity production dimension related to teaching of thinking?
Result	Evaluation of implementation process	8- In which topics was the implementation process for teaching, the thinking you participated in, improved?
	Evaluation of personal development at the end of implementation process.	9- How would you evaluate the contribution of implementation process regarding the teaching of thinking that you participated in to your individual development?

FINDINGS

In this section, the following findings take place in detail; in the context of professional development; skill, value, and professional competence dimensions; in the context of lesson planning and teaching process, lesson planning, teaching process, material use, contribution to activity production; at the end of the implementation process; Findings on the dimensions of evaluating the implementation process and personal development are included. Interviewed participants are identified with consecutive numbers to maintain anonymity (P1, P2, ... P12).

Findings related to the evaluation of pre-service teachers' vocational development

In this section, findings related to the opinions of pre-service teachers regarding the professional development results of the ABT implementation are presented. The development in skill dimension is given in table 5.

Table 5. Development in skill dimension

Theme	f
Critical thinking	6
Reflective thinking	2
Scientific thinking	1
Creative thinking	7
Thinking with a wide perspective	1
Authentic thinking	2
Thinking with different aspects	5
Analytical thinking	2
Attentive thinking	1
Empathetic thinking	1
Aesthetic thinking	1
Objective thinking	1
High level thinking	1
Problem solving	2
Collaborative thinking	1
Questioning	1
Total	35

As it is seen in Table 5, contributions of the study to develop the thinking skills were identified in the areas of creative thinking (P1, P3, P4, P6, P9, P10, P12), Critical thinking (P1, P4, P6, P7, P8, P10), Thinking with different aspects (P1, P4, P6, P10, P11), Authentic thinking (P3, P4), Reflective thinking (P1, P8), High level thinking (P9, P2), Problem solving (P6, P7), Scientific thinking (P1), Analytical thinking (P4), Attentive thinking (P4), Empathetic thinking (P4), Objective thinking or Rational thinking (P8), Collaborative thinking (P7), Questioning (P7), Aesthetic thinking (P4) and thinking with a wide perspective (P6).

P1: Yes, we believe...that our work affects our critical thinking, creative thinking, reflective thinking, and scientific thinking. We understood better that we should approach a subject from a different perspective.

P3: I strongly believe that our work improves our thinking skills. Because in this event, we kept our minds busy for days to derive something new and tried to add something to the event. We thought a lot on how to make the event creative and original, which improved my creative and authentic thinking skills.

P4: Since our study is authentic, different, original, we think that it has developed our creative thinking, critical thinking, analytical thinking, attentive thinking, empathetic thinking skills.

P9: Yes, we believe we did a cognitive process while doing our work. In this process, creative ideas were developed in order to make the learning-teaching process effective, clear, understandable, enjoyable and appropriate for the student level. This was an important step towards the development of our high level thinking skills.

On the context of the contribution to the development from value dimension; pre-services expressed that this study has an effect on some important values such as justice (P1, P5, P6), empathy, patriotism, austerity (P1), respect (P1, P3, P6), trust, self-confidence (P3), solidarity (P5, P11), diligence (P5), responsibility (P5, P6, P8), friendship, honesty, self control, patience (P6), helpfulness (P1, P6, P11), love (P1, P6), also cherishment to the art (P12), and realizing consciousness of human rights (P4).

P1: In our activity, there were values that support justice, empathy, patriotism, love, respect, austerity and solidarity. It also contributed to our value education.

P3: Considering the activity we do in terms of values education; When looking at national education programs, there are many values that are desired to be opened to children. We can also say universal notes of education. The student who comes to the board in the activity, imposes some values to himself. These values are such as trust, self confidence, respect. Lets take one of them. The student who comes to the board has to wait for his turn while doing the activity. The student does this even it is consciously or not in front of the society and respects people.

P5: In the activity; solidarity, diligence, responsibility, and justice values were prioritized within the scope of the social studies lesson. Values, which have an important place in the establishment and maintenance of a regular social structure, are vital for the education of individuals. Individuals who know, perceive, think, and internalize their values play an active role in society.

P6: Our study will add lots of value to students in terms of values education. In our activity, justice, friendship, honesty, self-control, patience, respect, love, responsibility and helpfulness are the values that our children should definitely have.

P8: The child will learn that his own freedom ends where the freedom of others begins. By reaching the awareness of rights and responsibilities, he will learn his right in legal ways.

On the context of the contributions of the vocational competence dimension; With this study, it has provided pre-service teachers with knowledge and experience of self expression in professional life. (P1, P2) P1 stated: "We cannot deny that our work and activities have improved us in terms of the teaching profession. That is to say, we were able to express ourselves more comfortably in our professional life than before and especially we have realized our self-confidence and how we

should communicate with students. Of course, this also contributed to education. We were able to see how we had comprehensive knowledge of field.”

ABT practice has opened the horizon for what contemporary principles and methods are how they are used, how to present with different activities (drama...), how to combine theory and practice, enrich the course through activities, how to reduce knowledge to student level, how to make the lesson fun, how a student can be active and how effective teaching can be (P3, P4, P8, P9). P3 stated: “We have gained knowledge and skills that match with our teaching profession and which we can add lots of good things in the future to our students in accordance with the information we have received during the four years, such as the teaching principles and methods course and the program included in the curriculum. As our activity was put into practice, we also provided active learning. It led us to shed light on our future career.”

The activities have made the pre-services gain experience in how they can interact, direct, control the classroom and provide a multi-dimensional and in-depth look at topics and internalize them (P6). P6: “Within the framework of our activities, we have examined and analyzed the events in depth, not in a narrow way but multi dimensionally, to internalize the interaction between teacher and student and how classroom control should be.”

It enabled to use and practice time efficiently (P11). P11: “We have learned to do activity theoretically. We have learned to involve the student in the process and use the time efficiently.”

They have learned to be able to produce original activities regardless of the textbook (P12). P12: “We will have the ability to create unique activities with our own imagination without being tied to a book while teaching the subject to our students.”

Findings related to the evaluation of pre-service teachers’ lesson planning and teaching processes

In this section, the findings related to the opinions of the pre-service teachers regarding the results of Lesson Planning and Teaching Process the ABT implementation are presented. Contribution from the teaching process dimension is given in Table 5.

On the context of lesson planning and preparation dimension, According to the results obtained from the states of the pre-service teachers, it has made them gain experience regarding the issues to be followed in lesson planning and a preparation process, the details of teaching and planning, how to develop an existing plan/program, how it is possible to produce something new, how to make creativity workable and to implement plan, how to make lesson effective, efficient and permanent (P1, P2, P3, P4, P6, P7, P8, P10, P11, P12). P1: “We have gained experience on how to make a lesson plan, what to consider when preparing a lesson plan, or how to develop a ready lesson’s plan and how to transfer these plans to lessons.” P11: “We have gained experience on how to handle a subject in the teaching-learning process, and how we will do the activities in the classroom by thinking about the ways of how to do.”

P9: “It has given us the opportunity to experience how to prepare the lesson plan with activities and how to achieve it in the most suitable and efficient way.”

According to the results obtained from the statements of the pre-service teachers, it has provided a chance to predict the meaning and the importance of preparing a lesson plan carefully in contrast to the results of plans which were designed with a frivolous perspective or in a sloppy and random way (P2, P3). P2: “It allowed us to take the lesson and plan more carefully and seriously, and to take into account the good or bad results of this and the benefits it brings to us and the children.” P3: “.....We thought how we can use the time in a lesson, how we can make it more efficient. This was definitely a great experience that it led us out of theory and made us gain as feedback.”

According to the results obtained from the states of the pre-service, it has made us gain a perspective of being more effective and efficient in considering and realizing the needs of the individual and society in preparing lesson planning (P5). P5: “It has had a positive effect on knowledge and skills in the context of determining the needs of the society and setting goals for it.”

On the context of teaching process dimension

Table 6. Teaching process dimension

Theme	f
Multidimensional thinking	1
Regarding the features of age	2
Readiness	1
Individual differences	1
Rhetoric	1
Diction	1
Presentation	1
Regarding cognitive, affective and psychomotor features	1
Abstraction	1
Deciding related to teaching	1
Total	11

As seen in table 6, there is a development in the subjects such as features of age (P2, P4), multidimensional thinking (P1), readiness (P2), individual differences (P5), rhetoric (P3), diction (P3), presentation (P3), cognitive, affective and psychomotor features (P4), abstraction (P6) and deciding related to teaching (P8).

P1: Our study has let us learn empirical, therapeutic, cybernetic aspects, etc. Also it made us gain the pedagogical skills, multidimensional thinking by holding a topic as a whole and creative thinking skills.

P3: Pedagogy is a teacher-centered education. More precisely, we can say teaching. We can also accept it as the science and art of raising children; that is to say, teaching is an art of human education. The activities we prepared were pedagogical tools for conducting pedagogical training and that is especially because of the fact that they include all generated tools. For this reason, I think that if we accept our activity as a tool, it gives us pedagogical skills in many dimensions. We have thought of many things such as how to give education, how to talk on the board, how to present the activity and we have gained skills such as self-confidence and personal development.

P8: It has made us gain pedagogical skills in deciding and determining what, how and when to teach. Through a certain goal, it has let us gain skills in creating activities by regarding the emotional, mental and social development of children.

P10: When we explained the subject to the students, we learned what and how to give it them. From this point of view, we reduce the number of bored students who do not pay attention to the lesson. Class control is also provided. It contributed mostly to the development of creative and critical skills.

On the context of using material dimension

New things produced together with the pre-service teachers made them feel more important in the process. P1: “It contributed to our individual development. That is... We did it based on the examples of activities. The communication we have with our friends has been strengthened and the control of the class and the creation of new things together have had an impact on feeling special.”

It is also stated that visual materials prepared for different purposes and following individual differences are beneficial for the learner. P2: “Because of the fact that the subject is child, the more effective and different materials we use, the more useful it will be for the child’s perception in accordance with multiple types of visual intelligence.”

According to the statements of the pre-services, the materials prepared in accordance with the quality and level have served the lesson, facilitated learning and increased the functionality of teaching, contributed to their mental development. P3: “There are many useful dimensions of our study in terms of material use. These materials serve the processing of the course. And it increases the functionality of the subjects. It becomes much easier to understand material since it is prepared for a level suitable for mental development.”

According to the statements of the pre-services, produced materials provide multiple learning, provide effective and permanent learning, increase interest and attention, embody abstract information and ensure the permanence of learning. P5: “...In the studies, the use of materials provides multiple environments by increasing the number of sensory organs involved in the learning process. By providing effective and permanent learning, it increases students’ interest and attention to the lesson and supports the efficacy dimension by ensuring that abstract information becomes concrete for learners.”

According to the statements of the pre-services, time and economic costs, create dimension of the loss. P7: “Material is seen as a very important tool in our activity as it provides trace of permanent learning by using visual and audio tools in education.”

Materials which were produced according to the statements of pre services provides to materialize concepts but the problem of providing materials creates a limitation. P9: “Since the study has mostly abstract concepts, concepts can materialized with the use of materials, but it will be difficult to get the material since limited material can be used on the subject.”

The materials, which were produced according to the statements of pre services, increase active participation. P10: “In our activities, we mostly paid attention to the use of materials, because the students like lessons with the materials more and participate actively in the lesson.”

On the context of producing activities dimension

Table 7. The dimension of activity examples’ contribution to the producing activity

Sub theme	f
The knowledge and experience in preparing the activity	8
Regarding the suitability for class level	2
Regarding the suitability for student level	1
Organizing activity according to interests	1
Organizing activity according to ability	1
Developing cognitive process	1
Developing in communication skills	2
Skill of presentation	2
Skill of activity and lesson management	1
Time management	1
Skill of perception and evaluation	1
Sensitivity	1
Responsibility	1
Total	23

According to table 7, there is a development in the subjects related to the dimension of activity examples’ contribution to the producing activity such as mostly the knowledge and experience in preparing the activity (P1, P4, P5, P6, P8, P10, P11, P12), regarding the suitability for class level (P1, P2), developing in communication skills (P3, P7), skill of presentation (P3, P7), the suitability for

student level (P2), organizing activity according to interests (P1), developing cognitive process (P2), skill of activity and lesson management (P11), time management (P11), skill of perception and evaluation (P9), sensitivity (P9) and responsibility (P9).

P2: In the theoretical part there were more activities to improve the cognitive process. This also guided us. The suitability of the given examples to the student level attracted our attention.

P3: In theoretical activities, we theoretically learned how to adjust our tone of voice in the classroom environment, how we should act and behave, how we can determine our speech and our style how we can present confidently in small community settings such as the classroom. It drew the route of how to follow this path and provided such a development.

P6: The activities given in the theoretical part were the first activities that we implemented in the classroom. In this regard, it was a nice experience. This was an important experience for the activities we will prepare and implement in the future.

P7: In the activity we held in the theoretical part, we think that it improved firstly, how we should address our students through the eyes of a pre-service teacher, and also our personal development such as the duration of the lessons.

Findings related to the result of implementation process, evaluation of pre-service teachers

Evaluation of the process in the results of implementation process

A result evaluation has been made to the pre service teachers about the level and in what subjects the implementation process helped students make inferences about how to teach the student with ABT. Looking at the answers from here; it has been stated that the teaching of thinking is a pedagogical necessity and is a sensitive issue that should be dealt with (P1, P3). P3: "Our study has given us perhaps the most important function of the teaching profession by letting us think about the question of how to teach thinking to the student. The teacher is just as successful as what he can transfer, not how much he knows. I think the fact that this problem comes to mind is the key point of this profession. This fact includes how to explain an idea to a young person in which level and in what style, what materials are used, how a lesson or idea or concept addresses the student and learning how to have fun."

They have gained more concrete information on how and by which methods of empathetic thinking skill will be gained to the student. P2: "We tried to support this, especially with the movies watched. We made the child think critically by empathizing. Previously, we had no idea about how we could do this. We thought that we could just convey this with questions as what you would do if you were in someone else's shoes. But we realized that many materials such as movies, photographs, case studies, news, stories, legends, documentaries and concept maps are materials for empathy."

While preparing activities to improve their thinking skills, they considered individual differences. P4: "Different activities were included considering the student may have individual differences." It was thought that the activities should be reinforced with practice. P6: "For example, before taking the environmental pollution activity in lesson, we made an inference about how the students would make this activity more effective after the activity and immediately afterwards, we also thought of applying the garbage collection in the garden of the school. We planned to take the students to a Kızılay Blood Donation Center after the event, before implementing the Kızılay event. The implementation led to the inference of the outcome importance from the achievements for the sake of the society." P7: "It helped us make inference in means of solving problems, regarding and respecting human rights and freedoms, being aware of citizenship rights and responsibilities and observing the

principles of justice and equality. Our necessity to produce activities is realized, that can let the individual think.” P8: “We learned in a practical way how the human brain works practically when it is in trouble.”

The pre-service teachers have experienced that they can be a guide to teaching thinking, can enable children to activate their minds and provide information, direct them to think by guiding them, as well as enable students to manage their own thoughts and produce thoughts and make them think critically by providing them with guiding questions. P9: “In our study, to teach the thinking, teacher as a guide can develop and teach the students by drawing a road map to them, activating the students’ minds with various questions and directions, and bringing them to knowledge through various questions and directions (P11, P9). “P11: “by standing on a guide position, we have directed our students to the answer with the clues.”

Evaluation of the individual development in the results of implementation process

At the end of the implementation process, pre-services were asked to make self-assessment with the question of “if you criticize yourself, how would you evaluate your positive and negative aspects?” According to the results appeared in this direction: They realized that they had some contradictions about how to put some theoretical issues into practice and they were inadequate (P6, P2, P12). P2: “We understood that we were not at a sufficient level in terms of narration and transfer of techniques and activities by going down to the level of children before implementation. However, we believe that after taking this course, we will make them more effective.”

At the end of the implementation, they experienced how it would be possible to be an effective teacher. They also discovered how they can activate the students. P3: “We learned how a teacher can be active and productive in this lesson through both activities and theoretical processes. We understood how our education model should make the student effective and how a teacher can be a guide.”

It has been realized that an individual’s hidden skills can be revealed and it is possible and useful to design activities for this (P4, P5, P6). P5: “We realized that our creative thinking skills have improved, we have been able to design different activities with these skills and we have seen that the individual reveals multiple talents that he does not realize in himself.”

They have learned how a teacher would get rid of the point of view that a teacher only tells the lesson through the presentation and learned that lesson can be effective, clear, understandable and fun with various methods and techniques in which the student is active while the teacher is the guide (P8, P10). P8: “We have learned how a teacher would get rid of the point of view that a teacher only tells the lesson through the presentation and learned that lesson can be effective, clear, understandable and fun with various methods and techniques in which the student is active and the teacher is the guide. The teacher should always be creative and produce new things. However, if we manage to be determined and decisive, if we internalize teaching as a target and making money as a tool, then we can become a more qualified teacher.” They saw the contribution of their creative sides in producing events (P10, P11). P10: “I have seen the benefit of my creative side.”

DISCUSSION AND CONCLUSION

In this research, social studies pre-service teachers were provided to develop activities designed for their thinking skills. It is aimed to investigate the effects of these activities in the context of professional competencies. Accordingly, data were obtained and evaluated on the context of professional development, skill, value, and professional competence; lesson planning, teaching process, material use and contribution to activity production and, at the end of the implementation process; on the dimension of evaluating the implementation process and personal development.

When the contribution of activities to teacher development from skill dimension is evaluated by the pre-service teachers; it was determined that ABT developed creative thinking, critical thinking, thinking from different perspectives, original thinking, reflective thinking, high-level thinking, problem solving, scientific thinking, analytical thinking, attentive thinking, empathetic thinking, objective thinking (rational thinking), aesthetic thinking, thinking with a broad perspective, collaborative thinking and questioning skills. It is known that activities can be integrated into different areas where they do not cover a single discipline. Social studies, which is in a social alliance such as a physical education lesson (Buell & Shirley, 1993), has a natural structure that needs the support of different disciplines. The common point of disciplines is that they need to think at a certain rate. Particularly, different disciplines show themselves in the field of social sciences. The dominance of any discipline from time to time leaves other disciplines behind by creating “disciplines hierarchy” indirectly. The same is true for thinking frameworks. For example, if we are dealing with historical thought, other thinking approaches which are away from being compulsory is usual (Smith, 2017). This unique structure of thinking is also related to the development of thinking skills. According to Gelen (2011), in order to develop thinking skills, sub-skills such as problem solving, analytical thinking, and creative thinking should be developed. In the research conducted by Özmen (2015) with pre-service teachers, historical thinking skills were associated with the number of reading books. This is supported by educational activities such as conferences, seminars and symposium. An important skill development that emerged in this research is critical thinking. According to Savich (2009), when critical thinking skills are integrated into lessons, academic success increases and a deeper and more meaningful understanding of history is obtained and questioning methods have a positive effect on critical thinking skills. On the other hand, the critical thinking skill gained in the context of pre-services combining ABT approaches with this educational philosophy will be a key gain in the learner’s perspective. According to Pohl and Beaudry (2015), social studies is generally perceived as a course consisting of names, places, and dates among other teaching courses. None of these approaches supports critical thinking, which is necessary for learners in the 21st century. Literacy and social researches offer strong potential to develop critical thinking. Teaching meaningful forms of interaction through historical fiction, films, and questioning, by putting alternative approaches into practice and directing them to research and analyze complex social and global problems create an important opportunity in the development of critical thinking. Teacher-centered methods such as active participation require a variety of learning styles, collaborative activities, and technology to motivate the student and develop critical thinking skills (Sayre, 2013). In the research conducted by Baysal et al (2016), most of the teachers responsible for teaching skills are aware that skills are teachable. According to Enciso and Daza (2017), Instructors in teacher education programs have an enormous opportunity to help teachers become critical thinkers and these students will help their future students develop their critical thinking skills. These research results are compatible with current findings of research.

Another skill developed in the results of this research is analytical thinking and high level thinking. Analytical thinking and critical thinking are seen as distinctive features in individuals (Yılmaz, 2019). According to the research conducted by Arseven, Dervişoğlu and Arseven (2015), it was concluded that pre-service teachers’ analytical thinking skills developed the most. On the other hand, the opinion expressed by Tuncer and Kaysi (2013) that some pre-service training activities will be useful in developing the metacognition thinking skills of pre-service teachers supports the results of this study. According to this view, education and teaching staff should use their metacognition thinking skills in the teaching process and should provide their students with opportunity to model these skills as role models. Pre-service teachers should be provided with the basic skills required by the profession (Güneş, 2016). As a matter of fact, according to Tok and Sevinç (2012), creative thinking skills of teachers should be developed in order to make the students gain creative thinking skills. Aesthetic thinking, which goes along with creative thinking, is included in the perspective of this study. Activities for the development of aesthetic thinking provide powerful tools that encourage creative discovery and products by developing aesthetic sensitivity (Dolapçioğlu, Gürkan, & Karakuş, 2019). According to Özbal and Aydoğan (2017: 259); “Aesthetic education aims to use the knowledge

of something in a good way.” This aesthetic understanding establishes an artistic connection between teaching and learning in the design of activities, in the enjoyment and efficiency of the lessons.

Considering the contribution of the activities to the development of the pre-service teachers from the value dimension; it is determined that it develops some values such as justice, empathy, patriotism, austerity, respect, trust, self-confidence, solidarity, diligence, responsibility, friendship, honesty, self-control, patience, helpfulness, love, as well as appreciating of art and awareness of human rights.

When the contribution of pre-service teachers to their development from the professional competency dimension is evaluated; it has been determined that it has developed knowledge and experience about matters related to self-expression in professional life, the process of knowledge and practice about contemporary principles and methods, presenting them with different activities (drama, etc.), combining theory and practice, enriching the course through activities, reducing knowledge to student’s level, making the lesson fun, and regarding active participation and effective teaching. On the other hand, the research made them have opportunity to make inferences about the teaching of thinking skills with activities, how to interact with the student, how they can direct them, how to achieve class control and provided them to look with a multidimensional and in-depth way at the subjects and made them internalize. It has led the way of being able to develop democratic attitudes and behaviors, to create an aesthetic lifestyle, to act together with the group, to establish a cause-effect relationship, to create creativity and imagination and it has given opportunity to create questioning. It has also helped practice in means of using time efficiently. Pre-services learned to be able to produce original activities regardless of the textbook. In the study conducted by Kılıç (2006), there was a difference between the implementation and observation levels in 75% of the pre-service teachers’ behavior throughout the teaching process. This result was interpreted as pre-service teachers failing to acquire these behaviors at a sufficient level. It can be said that the developments expressed in this study are important outcomes in increasing the qualifications of pre-service teachers. The skillful realization of teaching and its being based on activities increase academic success in the classroom, and it is also beneficial to understand the topics in question and to support concept teaching (D’souza, 2017). The contributions of pre-service teachers from the professional competency dimension in this research are very important developments that support the contemporary teacher competencies of the Ministry of National Education. According to Seferoğlu (2004); The deficiency of knowledge in matters that are inadequate in professional terms can be supported with electronic resources. Successful experience develops more self-confidence with the realization of their own abilities and skills. This situation leads to efforts and searches for self-improvement in an effective and efficient way.

When the contribution of pre-service teachers to development from lesson planning and preparation dimension is evaluated; it has made them gain situations related to the lesson planning and preparation process, the details of teaching and planning, the ability to develop an existing plan/program, to activate creativity and to produce something new, to realize the logic and philosophy of the implementation process of the plan, and to make course effective, efficient and permanent experience. On the other hand, the process provided an estimate of the meaning and significance of preparing a lesson plan, what would be the consequences of careless and random planning from a serious point of view. It also provided the pre services with an awareness of the needs of the individual and society in preparing ABT lesson plans.

Contribution to development from the use of material; it has provided development on the subjects related to the age features, multidimensional thinking, readiness, individual differences, communication skills (such as rhetoric, diction and presentation), cognitive, affective, psychomotor features, abstraction and decision making. New things produced together with the pre-services made them feel more important in the process. It has been realized that visual materials prepared in accordance with different and individual learning differences are valuable for the learner. In the process, the materials prepared according to the pre-services are qualified and appropriate with their

level, served the lesson, facilitated the learning and increased the functionality of teaching, contributed to active participation and mental development. Some negative situations were emphasized during the experience. Accordingly, time and (economic) cost are seen as the loss. Materials which were produced according to the pre services make the concepts concrete, but the problem of providing materials creates a limitation. According to Priyono, Wena and Rahardjo (2017); Teaching with activities is a very important approach to develop students' three learning areas (their cognitive, emotional, and psychomotor) equally. In terms of the learning process, it ensures the active participation and creativity of the students. In this case, an appropriate balance must be appeared between physical, mental, emotional, and intellectual activities. On the other hand, knowledge, attitude and skills need to develop in a balanced and harmonious way. In other words, it supports the importance of its holistic development. In this context, it is possible to state that pre-services reach these developments and that there are important outcomes for the teachers who will be responsible for ensuring the competencies of the students in the future. According to Lefstein (2002), the efforts of associating knowledge with real life in formal education and the attempt to encourage learners to it are fed from authentic sources. Collaborative trends in team work create an environment for working in groups distributed from time to time by creating opportunities for peer communication. The teacher cannot observe all students at the same time or easily control their attention. According to Vitulli and Pitts (2013: 117); Leading students to develop an additional way to integrate visual images into social studies lessons and to provide opportunities to study and evaluate the perspective of art, analyze and evaluate the art elements and question the principles of images, and to view and analyze the world around the students. It is stated that the implementation of effective comprehension strategies in social studies lessons is effective in increasing the students' success, skills, and confidence. This approach allows them to understand the rich content and concepts offered in Social studies curriculum. Determining effective teaching strategies for effective understanding in social studies lessons is essential for students to learn (Bartz, 2016).

When the contribution of pre-service teachers to the development regarding the implementation process result is evaluated; pre services stated that the teaching of thinking is a pedagogical requirement and a sensitive subject to deal with. They obtained information about teaching through evidence-based activities on how and by which methods and techniques of empathetic thinking skills will be gained to the student.

It has been experienced that the implementation discussed in this research can be as a road map in teaching thinking, enabling children to activate their minds and provide information, direct their thinking by guiding them as well as enable students to manage their own thoughts by taking part in the activity therefore they can produce thoughts and to make them think critically by making inquiries with key questions. In the study conducted by Kösterelioğlu, Bayar and Kösterelioğlu (2014), it was stated that the activity-supported learning saves teaching from passivity and increases communication with the group members, has a positive effect on learning and permanence, makes socializing and feeling themselves valuable, and provides a better understanding of what is learned.

According to Anwer (2019); Despite the difficulties in schools, it is possible to create teaching materials and use teaching techniques. Participation in in-service training programs is very important for teachers equipping with up-to-date methods and techniques.

When the contribution of the development to the evaluation of the personal development is evaluated in the results of the implementation process; it was observed that they realized that they had suffered from some contradictions and how inadequately some theoretical issues were put into practice. It has been observed that the individual's implementation can reveal the hidden skills of the learners and be able to design activities for this. They got rid of the point of view that a teacher only tells the lesson only through the presentation, and they have seen that the lesson can be active, the teacher is a guide, the course can be effective, clear, understandable and fun with various methods and techniques; and the effect of their creative aspects in producing activities is important. In the study conducted by Çelik, Yorulmaz and Çokçalışkan (2019), it was observed that pre-service teachers

evaluated themselves with a high average score that can be considered high in terms of general competencies of teaching profession. In general, in the evaluation, the expressions of development that emerged from the opinions of the pre-services from the competence dimension can be evaluated as having similarity at this point.

Recommendations

ABT should be handled separately with each content and within the framework of detailed activities in order to develop thinking skills in social studies lesson.

- In the curriculum of the education faculties of the pre-service teachers, the emphasis should be on producing original activities for the content of the social studies course in the appropriate content.
- In the faculties of education, the development of thinking skills handled in Social Studies education should be based on examples of activities, and the process should be followed and controlled in an order.
- Teacher training institutions should redesign their curriculum to provide sufficient time and space for activity-based learning.
- Pre-service and in-service teacher training programs should be directed to the theoretical and practical which are knowledge required for the successful implementation of ABT.

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