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## FINANCIAL LITERACY IN TURKISH PRESCHOOL EDUCATION<sup>1</sup>

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**Abstract:** Financial literacy is one of the basic skills of the 21st-century. It is an important skill to survive in the complex economies of the modern era. It is better to develop financial literacy skills at early ages. This study aims to examine the current state of FL education in preschool education in Turkey. For this aim, in this qualitative study, the Turkish preschool education curriculum was examined and the interviews were conducted with 20 preschool teachers constituting the study group. The data collected from document analysis were subjected to descriptive analysis and the data collected by interviews were subjected to content analysis. Results of the study show that Turkish preschool education is not supportive of financial literacy both in terms of curriculum and the teachers. For a strong foundation of FL in Turkey, the Turkish preschool education curriculum should be revised and the preschool teachers must be supported in terms of the development of FL skills at early childhood.

**Keywords:** Financial literacy, early financial literacy, preschool education, preschool teachers.

### **Tican Başaran Semra, PhD**

Asstist. Prof. Dr.  
Education Faculty  
Muğla Sıtkı Koçman University  
Turkey  
Contact: +90 252 2115021  
E-mail: semrabasaran@mu.edu.tr  
ORCID: <https://orcid.org/0000-0003-2734-7779>

### **Gürdal Gözde,**

Teacher  
Ministry of National Education  
Turkey  
Contact: +90 252 2230250  
E-mail: [gozgurdal@gmail.com](mailto:gozgurdal@gmail.com)  
ORCID: <https://orcid.org/0000-0002-7985-2198>

### **Altıntaş Sedat,**

Research Assistant  
Education Faculty  
Muğla Sıtkı Koçman University  
Turkey  
Contact: +90 252 2115012  
Email: [sedataltintas@mu.edu.tr](mailto:sedataltintas@mu.edu.tr)  
ORCID: <https://orcid.org/0000-0003-4637-561X>

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## INTRODUCTION

In the modern era in which we witness the incredible improvement of artificial intelligence, scientific, technological and financial improvements have affected educational systems. Nowadays, young people have faced with more complex financial products, services and systems (OECD, 2020). The financial perspective basing on education in this new century forces the schools that were passed down industrial era to be ready for future lifestyles and financial conditions of new generations which will already not exist today (Esteve, 2000). This event triggered a paradigm change in education. The new paradigm requires schools to equip future generations with eccentric knowledge and skills. The suggestions of Partnership for 21st-Century Skills (Battelle for Kids, 2019) on placing programs in schools in which critical thinking, creativity, communication and collaboration skills are aimed to be improved for serving the purpose of the needs in the new century draw a frame of education in the modern era. In The New Vision for Education document based on meta-synthesis prepared by World Financial Forum, 16 skills that are needed for the 21st-century are announced under the main themes of Foundational Literacy, Competencies and Character Qualities (World Economic Forum, 2015). Financial literacy (FL) is stated under the first main theme as one of the basic skills. In the 2023 Education Vision Document declared by the Turkish Ministry of National Education (MoNE), it is stated that it is aimed to improve children's multi-dimensional development to answer the needs of the modern era. It is indicated that an educational perspective that is convenient with 21st-century skills and skill-based activities is commonly adopted in the new educational vision. It is especially pointed that there is a need to design skill-based education and to create awareness on multiple literacies (digital, financial, social media, etc.) stated in the 21st-century skills.

As one of the main literacy types, FL has taken much more place in international literature after the 2008 global crisis and it has become more of an issue nowadays. Some factors such as financial security problems based on financial problems in the entire world increased diversity in financial products and services, low saving rates and unplanned loans make financial literacy more important for people. There are some different definitions for FL in the literature. OECD (2017a) defines FL as *"knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life"* (p.24). The Central Bank of the Republic of Turkey (2015) defines financial literacy as *"getting enough financial knowledge to decide effectively and consciously on a personal budget, and the ability to increase individual and social financial welfare as applying these decisions"* (p.5). According to Roy Morgan Research (2014), FL is *"making conscious and self-confident decisions as all aspects on spending money, saving, budgeting, investing and planning for future"* (p.1). Potrich, Vieira and Mendes-Da-Silva (2016) also defined FL as making suitable financial decisions between different options as using financial knowledge and the ability process of applying these decisions. According to Lusardi and Mitchell (2007), FL is the prerequisite for financial success. In PISA 2012 Students and Money Report, it is stated that financial literacy requires some abilities for children such as getting basic mathematics literacy skills on calculating percentages and transferring currency units; having language skills on comprehending and interpreting the advertisements or some contracts; and controlling emotional and psychological factors that can affect financial decisions (OECD, 2014). In general, as referring to the definitions in the related literature, it can be said that FL is the ability or proficiency of using financial knowledge and skills correctly to supply both individual and social welfare. Improving FL skills is an important factor not only for individual development but also for community development. PISA 2012 results show that there is strongly a positive correlation between FL performance and mathematics performance (0.83) and literacy performance (0.79), and also there is a significant relationship between FL performance and socio-economic status. This is the main reason for improving FL skills of children has taken place near the top educational and financial policies in many countries. In this scope, improving FL skills via systematic education is on the educational agendas nowadays. In some countries, financial concepts have been integrated into regional or national primary and secondary education curriculum instead of adding new ones into heavy curriculums. However, in some countries, FL education strategies have been developed via extracurricular or after-school activities (OECD, 2017a). OECD Council on Principles and Good Practices in Financial Education and Awareness at the very beginning of the 21st-century has recommended starting FL education in schools and as early as possible

(OECD, 2005). Two main reasons for this recommendation of OECD have been stated: at first, predisposing necessary skills for young people before they are active financial consumers; at second, early financial education in schools is more effective than remedial programs for adults. FL research of PISA 2018 indicates that 94% of 15-year-olds have learned financial issues thanks to their parents and many of them have some problems with FL (OECD, 2020). In 20 countries and economics which have been in this research, it is stated that nearly one out of every four students is not adequate even for deciding on basic daily spending issues; nearly one out of every three students have abilities on interpreting and assessing the terms based on banking although about every other students have a bank account or/and bank card, and socio-economically advantageous children have much more possibilities to perform financial literacy. Not being a part of this research is a significant deficiency for Turkey.

Fox, Bartholomew & Lee (2005) who have indicated the importance of FL on understanding and knowing financial terms and making effective financial decisions of consumers emphasize that FL abilities can be developed via systematic financial education under the guidance of a curriculum that includes knowledge, behaviors and attitudes related to FL. Financial education is a process by which consumers can develop an understanding of financial products, risks and opportunities, thus enabling them to make informed financial decisions. Making financial education widely accessible benefits society as a whole, reduce the risk of financial exclusion, and encourage consumers to plan and save, which prevents over-loans (European Economic and Social Committee, 2017).

Plenty of research results show that individuals who have received a quality financial education are more likely to plan for the future, save money and engage in other financially responsible behaviors (Bernheim, Garrett and Maki, 2001; Cole, Sampson and Zia, 2011; Lusardi, 2009; Atkinson and Messy, 2015; Bruhn, Leao, Legovini, Marchetti and Zia, 2016; Miller, Reichelstein, Salas and Zia, 2015; Brickhouse, 2018). It is seen that people who have FL education can decide on financial issues and they can behave more consciously than others on managing their money (Hilgert, Hogarth and Beverly, 2003).

European Insurance Industry (2017) defines financial education as a long-term process that enables children to acquire necessary information and skills for financially responsible behaviors by integrating financial themes into school programs at early ages. Learning about financial topics such as getting money, spending money and saving at early ages forms a strong foundation for good financial decisions in adulthood (Holden, Kalish, Dietrich and Novak, 2009). Credit Union National Association (2005) states in Thrive by Five cite that children can learn money from many different sources; they may observe how the adults use the money before school ages and they can develop an attitude towards using money thanks to this observation. These results show that children meet financial products and services at early ages and there is a necessity for improving FL skills of children via early financial education.

While developing attitudes and habits, people learn from parents and others at early ages. This issue indicates the importance of early interventions (Whitebread and Bingham, 2013). Friedline (2015) states that children can develop financial behaviors at around the age of five and six- and they can get acquisitions related to finance. It is necessary that in their early ages, young people should be given education on budgeting, loaning, controlling the money or borrowing before they get a profession, and there should be financial education programs for surviving on financial issues in the future (Yiğitbaş, Temeloğlu and Şimşek, 2020). Results of the above studies show the importance of providing developmentally appropriate financial education at early ages. However, when financial education politics are examined, it is seen that the target group for financial education is generally old-age groups not for the early childhood period (OECD, 2017a). In a study examining FL programs developed by thirty central banks, Fluch (2007) noticed that only one-third of the programs were for primary school children. In another study examining FL programs, Holden et.al. (2009) pointed that there have been a limited number of programs for early ages. Related to the low level of FL, many studies to develop, implement and improve educational programs fostering FL have been initiated all around the world (Wagner, 2015, p.11). Many countries which understand the importance of FL for young people and its potentials to create a skillful and knowledgeable generation have been started to develop financial education programs for children and young people (OECD, 2017c). They emphasize that schools should be supported to provide FL education programs for young children. In Turkey, studies on FL have been started especially after the economical crisis between the 2002-2008 period. Adalar (2019) indicates after the economical crisis, in the revised primary school

programs, some topics related to FL have been integrated into social studies and science of life courses in 2005. Similarly, Güvenç (2017) stated that although there are some learning outcomes related to FL in the primary and secondary school curriculum, these are not enough to manage people's lives both today and in the future. In Turkey, the initiatives to develop inclusive education programs fostering FL have been supported by both government and non-governmental organizations (NGOs). In 2011, the Financial Stability Committee was founded and “Financial Access, Financial Education, Protection Strategies on Financial Consumers and Action Plans” that was published by this committee has been put into practice (Yiğitbaş et. All, 2020). In 2011, with the collaboration of the Financial Literacy and Access Association (FODER), the Ministry of Family and Social Policies designed FL education programs which consisted of managing money, the effective usage of current sources and loaning issues for children and young people aged 14-25-year-olds who have been both in and out of legal protection (The Ministry of Family and Social Policies, 2016). In 2016, with the collaboration of the Turkey Economic Bank, MoNE General Directorate of Vocational and Technical Education has begun to supply education programs on FL concepts based on budgeting, loaning, borrowing, investing, financial rights and responsibilities for teachers and students (Karataş, 2017). When the above financial education programs in Turkey are examined, it is seen that they have been generally designed for children, young and adult people, there is nearly no specific program for very young learners at preschool age. However, the early childhood period is the most crucial period for human capital formation (Naudeau et.al., 2011). This period in which learning and development have been very fast is seen as a window of opportunity by educators and economists.

The abilities and skills that are acquired in this period of life affect the learning outcomes in the following periods (Heckman, 2008). Early intervention in this period can create a strong beginning for a better life (Kagan & Zigler, 1987), and it provides high economic gaining in longer periods (Heckman and Masterov, 2007).

If it is thought that financial habits are shaped in early childhood periods as permanently, it is clear that this period is a good chance to create a good basis for FL skills (OECD, 2014). Unfortunately, there is no study on early FL education in Turkey. There is a clear need to examine the PEC in terms of FL and look at FL in preschool education from the eyes of preschool teachers for a better understanding of early FL education in Turkey. In this scope, the main aim of this study is to examine the current state of FL education in preschool education in Turkey. As for this main purpose, it is aimed to answer the following questions:

- 1- What are the expected learning outcomes, concepts, activities, learning centers and special days/weeks related to FL in Turkish PEC?
- 2- What are the preschool teachers' views and opinions on the meaning of FL and FL education in preschool education?
- 3- What are the preschool teachers' views and opinions on the current state of FL education in preschool education?
- 4- What are the suggestions of preschool teachers on FL education in preschool education?

## METHODOLOGY

### DESIGN OF THE STUDY

This study which aims to examine FL education in preschool education is based on a qualitative research approach. Qualitative research methods are studies that aim to reveal participants' views and actions in a detailed way as realistically and holistically (Creswell, 2003; Yıldırım and Şimşek, 2016). With this scope, in this study in order to analyze FL education in preschool education in a detailed and holistic way, at the first stage, the 2013 PEC (MoNE, 2013) was examined; at the second stage, interviews were conducted with preschool teachers.

### PARTICIPANTS OF THE STUDY

The participant group of the study includes 20 volunteer female preschool teachers who have been working in public schools in a city on the west side of Turkey in the 2018-2019 school year. While constituting the participant group the convenient and the maximum diversity sampling methods were taken into consideration (Yıldırım and Şimşek, 2016). The demographic characteristics of the participants are presented in Table 1.

Table 1. Demographic Characteristics of the Participants

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<b>Experience (year)</b>	
≤10	2
11-20	8
21-30	8
≥31	2
Minimum= 10	Maximum=34
	$\bar{X} = 22$
<b>Class Type</b>	
Independent Preschool	10
Practice preschool	5
Primary School Nursery Class	3
Secondary School Nursery Class	2
Total	20
<b>Age Groups of Preschoolers</b>	
3-4	2
4-5	3
5-6	15

**DATA COLLECTION PROCEDURES**

In qualitative research methods, observation and interviews can be used to collect data; if it is necessary, documents can also be examined (Yıldırım and Şimşek, 2016). In the first stage of the study, the PEC that has been implemented since 2013 is examined in terms of FL. In this examination, different components of the curriculum that are the expected outcomes, themes, activities and special days/weeks were examined in terms of FL. In the second stage of the study, semi-structured interviews were conducted with preschool teachers. The interview form used in the semi-structured interviews was finalized after feedback from experts from preschool education, qualitative research methods and education economics; and a pilot study with two preschool teachers. In the final version of the interview form, there were six items two of which are “what means FL for you?” and “what are your suggestions for FL education in preschool education?”. Before the interviews, an informed consent form is delivered to the participants. The interviews with preschool teachers who had accepted to be an interviewee voluntarily were conducted in their schools and took 25-30 minutes. The interviews were recorded by mobile phone. Interview audio records were given a code like P1, P2, then transcribed into written documents. Audio and written forms of interviews are being kept in a file in a computer asking for a password to enter.

**DATA ANALYSIS**

The data collected via the examination of PEC were subjected to descriptive analysis (Yıldırım and Şimşek, 2016). In the descriptive analysis, the data were coded and interpreted based on the themes of expected learning outcomes, concepts, activities, learning centers and special days/weeks. The collected data were subjected to inductive content analysis (Miles and Huberman, 1994). The data transcripts were read few times and coded in two steps: First in-vivo and open coding, second axis coding was conducted. Then the relations between the codes under the specific themes were explained and interpreted and supported via direct quotations. In the content analysis, NVivo 11 was used.

According to Lincoln and Guba, there are different ways of providing reliability in qualitative studies (as cited in Teddlie & Tashakkori, 2009). In this scope, prolonged engagement was provided by asking additional questions during the interviews. For the aim of preventing data loss, the interviews were recorded after the permission of the participants. Two of the recordings were selected randomly to check the researchers’ independent codes, and differences of opinions were coded again as making a consensus. While presenting the findings of the study, statistical values were also given to improve objectivity and so, the opportunity for comparison of data was provided. Some direct quotations were used to support interpretations and to reflect the perspectives of the participants. Triangulation was provided by integrating teachers having different characteristics into the study, and by examining the documents to support the data collected from preschool teachers. For the transferability of the study, detailed information about the context and procedures of the study was presented under the title of methodology. For the validity of the



study, the opinions of two experts in qualitative research methods on the design and methodology of the study and expediency for results were taken. For the confirmability, themes derived from data, interpretations and results were shared with two participants of the study.

## FINDINGS/RESULTS

In this section, descriptive and content analysis findings are presented.

### FL IN TURKISH PRESCHOOL EDUCATION CURRICULUM

The findings related to FL in preschool education curriculum are presented in Table 2.

Table 2. FL in Turkish PEC

Program components		Factors on FL
Expected Outcomes	Cognitive Development Field	Outcome 4. Counting the objects.
		Outcome 5. Observing the objects or creatures.
		Outcome 6. Matching the objects based on their features.
		Outcome 7. Grouping the objects based on their features.
		Outcome 8. Comparing the objects based on their features.
		Outcome 9. Ordering the objects based on features.
		Outcome 16. Subtracting and adding up by using objects.
		Outcome 17. Finding cause-effect relationship.
		Outcome 19. Finding some solutions for problems.
		Outcome 20. Preparing graphics by using object/symbol.
	Social-Emotional Development Fields	Outcome 9. Identifying different cultural features.
		Outcome 16. Identifying the different roles and responsibilities of people in society.
Concepts		Money
		1-20 numbers
Activities		Mathematics
		Preparation for literacy
		Field trips
Learning Centers		Drama center
		Some centers that are created in necessary cases: Bank, shopping centers
Special Days/Weeks		Energy Conversation Week

As a result of the examination of the Turkish PEC, it is seen that there is no directly related outcome on FL within totally 63 expected learning outcomes; however, as it is seen in Table 2, 12 outcomes in cognitive and social/emotional development fields are found as related to FL concepts. In the cognitive development field, outcome 4,5,6,7,8,9 are thought of as related to FL since in learning activities toward observing, matching, comparing, and ordering the objects based on their features money can be used as a learning material; outcome 16 and 20 are seen as related to FL since arithmetic and graphic skills are the basic skills for financial transactions; outcome 17 is seen as related to FL because it is based on a balance of income and expenses, borrowing, loaning, investing; and outcome 19 is thought as related to FL since it is related to the solution of financial problems. In the social-emotional development field, outcome 9 is seen as related to FL since it is thought that money can be used as a cultural factor in the activities recognizing the culture of different countries; outcome 16 is seen as related to FL since the financial professions can be given as examples of different roles and responsibilities in the society.

Table 2 shows that among 84 concepts in PEC, only money and numbers (1-20) are related to FL. As a result of the analysis, even if there are just two concepts for FL, it is seen that the program suggests adding some other concepts if it is needed.

In PEC, there is no direct activity for FL education; however, Table 2 shows that literacy, mathematics and field trip activities are related to FL education. Since they consist of basic mathematics knowledge and problem-solving skills, literacy activities; since the mathematics activities are based on acquiring basic mathematics concepts, reasoning and problem-solving skills; and since the field trips provide observation,

researching, and problem-solving are seen as related to FL. Yet, in the program, it is seen that there is no specific field trip on financial professions and daily practices of financial terms.

On the other side, there is no learning center specific to FL in the program. As for the drama center, while the use of the stethoscope, helmet, chef’s hat, and keyboard etc. for teaching different professions was recommended, there are no specific recommendations for using real-life materials such as money, check or credit card related to FL. However, in the program, it is stated that new learning centers can be designed if it is needed. In this sense, it is seen that teachers have the opportunity of designing some places such as a bank, restaurants, shopping centers, etc. to foster the FL skills of children.

Lastly, it was seen that PEC covers 21 of 35 special days/weeks that are defined in -2537-numbered and September-2005-dated- journal of notifications of MoNE. Table 2 shows that from among the 21 special days/weeks in PEC only the Energy Conversation Week was found related to FL since it covers saving. Even though it is stated in the same regulation, neither Entrepreneurship and Conservation nor Forehandedness, Investment and Turkish Domestic Products Week are included in the PEC. It is also seen that Tax Week that was added into special-days/week list by MoNE (2020) is not in the PEC because it has not been updated since 2013.

FINDINGS ON PRESCHOOL TEACHERS’ VIEWS AND SUGGESTIONS FOR FL

In the presentation of findings on preschool teachers’ views and suggestions, a holistic approach is used. Firstly, main themes and related sub-themes are presented, then direct quotations of participants are given. Content analysis results are visualized and presented in Figure 1.

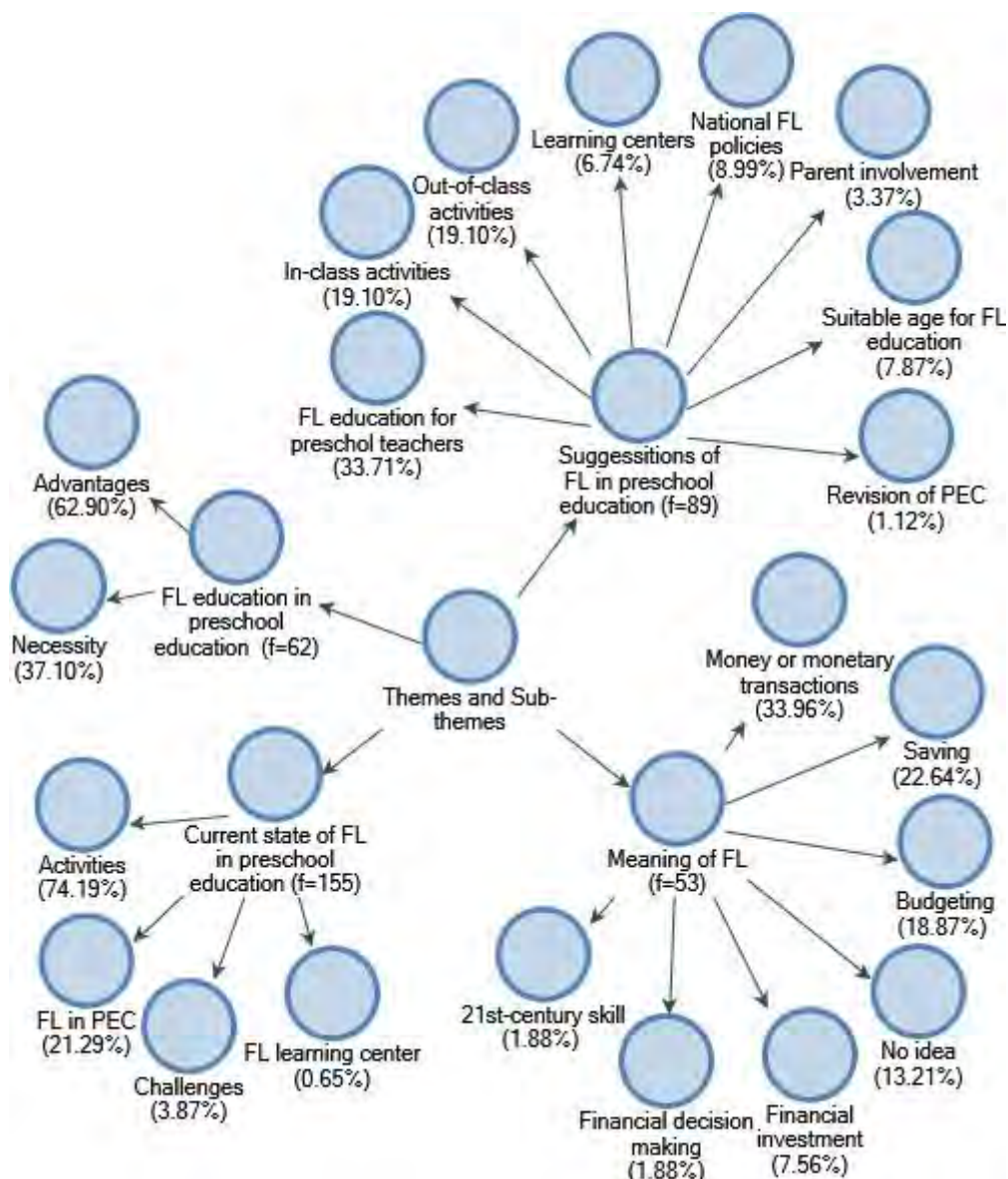


Figure 1. Overall results of content analysis

It is seen in Figure 1 that preschool teachers' views on FL are categorized into four main themes as referring to research questions. In the following section, each main theme is analyzed in its main scope in a detailed way. The findings on the meaning of FL for preschool teachers are presented in Figure 2.

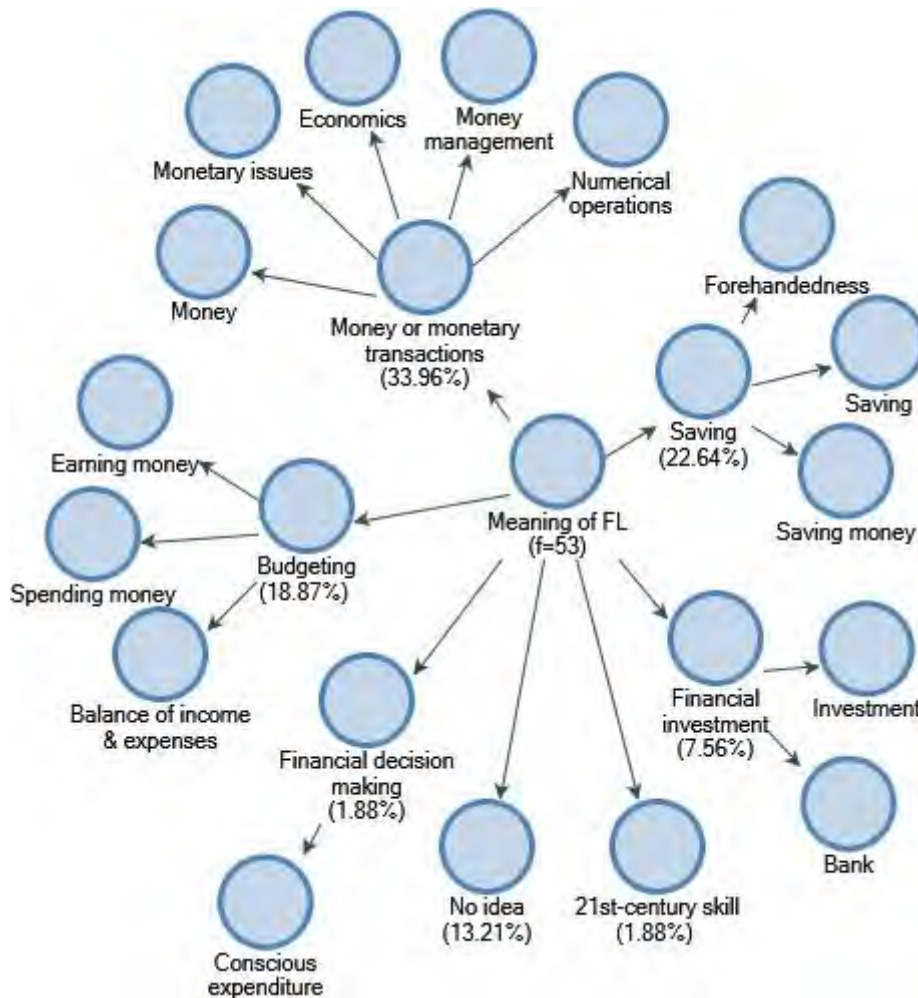


Figure 2. The Findings on what FL means for preschool teachers

In Figure 2, it is seen that 13.21% of preschool teachers' views grouped under the theme of have no idea. It is realized that preschool teachers who have no idea about FL cover 35.00% of the total participants, and the preschool teachers who heard this term first time in this study constitute 20.00% of the total participants. One of the preschool teachers who say s/he knows the meaning of FL defined FL as one of the 21st-century skills; however, it is seen that the other preschool teachers do not mainly have no idea about the FL in general but evokes some terms categorized into themes of money or monetary transactions (33.96%), saving (22.64%), budgeting (18.87%) and financial investment and deciding (9.44%).

In the money and monetary transactions theme, a huge number of participants stated that FL could be a term related to the money or monetary issues; some others referred that FL could be based on logically managing money, and some others stated that this term might be related to numerical operations. As for saving themes, some of the participants stated that FL means saving money and forehandedness; as for budgeting theme, some of them stated that this term was about earning and spending money, and managing balance on income-expenses; as for the financial decision making and investment theme, some participants declared that this term could be related to conscious expenditure, saving and bank terms.

*K18. Honestly, I heard it for the first time, I don't know, unfortunately.*

*K6. I have heard financial literacy term nowadays much more and I know it is a life skill in the 21st-century.*



*K5. Money, economy are the terms that made me associated. Even if I can't manage it very well, I try to teach it to children more or less.*

*K17. I think it can be about mathematics... Am I right?*

The findings of preschool teachers' views on FL in preschool education are presented in Figure 3.

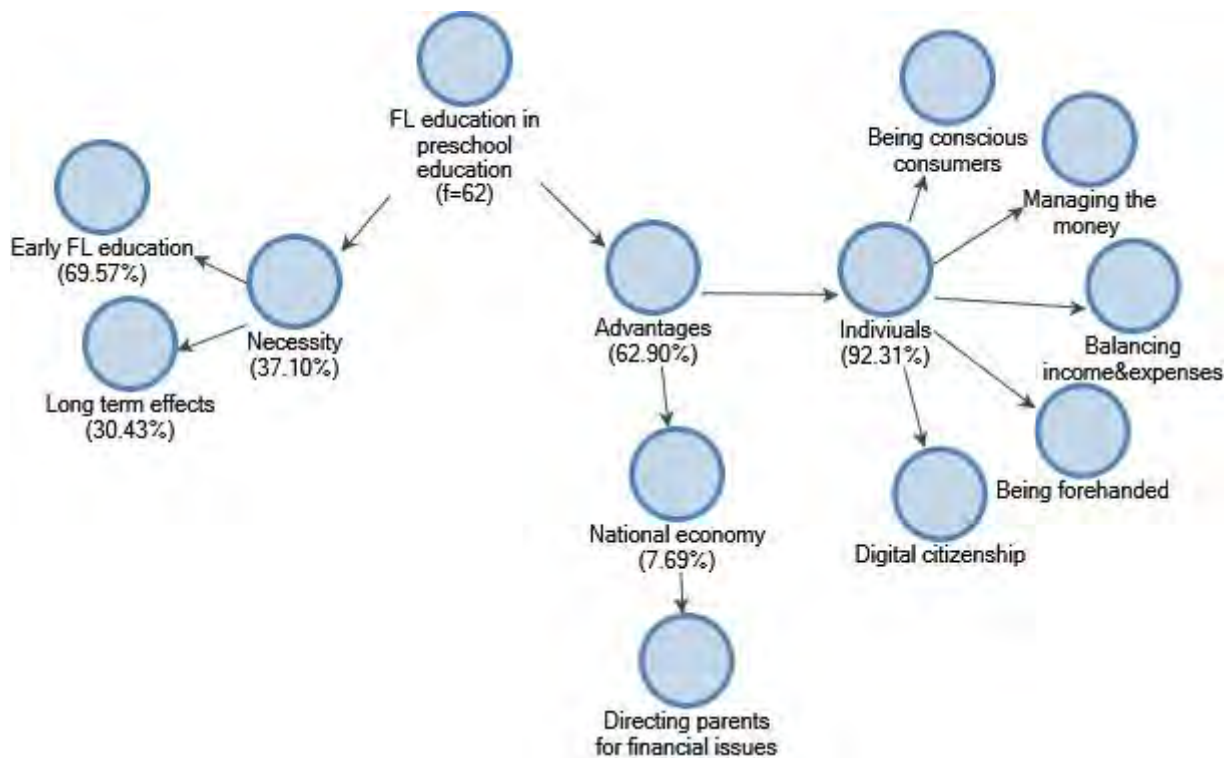


Figure 3. The Preschool teachers' views on FL education in preschool education

Figure 3 shows that the views of preschool teachers on FL education in preschool education are categorized into two main themes. In necessity theme (37.10%), the participants stated that learning in early childhood has long term effects (30.43%), so FL education should be integrated into preschool education (69.57%); even one of the preschool teachers stated FL education is a necessity for all citizens in the society. Under the theme of the advantages (62.90%), the participants stated in an order that FL education can be advantages for individual issues on being conscious consumers, understanding and managing money, being forehanded and improving digital citizenship skills (92.31%), and additionally, it makes an advantage on directing parents for financial issues and profiting for the national economy as being a conscious consumer in the future (7.68%). Figure 3, also, remarks the views of preschool teachers on FL education are concentrated on individual advantages.

*K7. The skills taught in early childhood can affect very positively in the future life because children never forgot what they learn at early ages.*

*K3. I think FL should be learned in all ages. We consume so much as society... I think we should revise our spending and consumption habits.*

*K4. (Early FL education) It is necessary for managing balance on income-expenses in their family lives and professional lives, loaning, managing financial sources effectively; and then for the national economy, it is necessary.*

The findings of the preschool teachers' views on the current state of FL training in preschool education are presented in Figure 4.

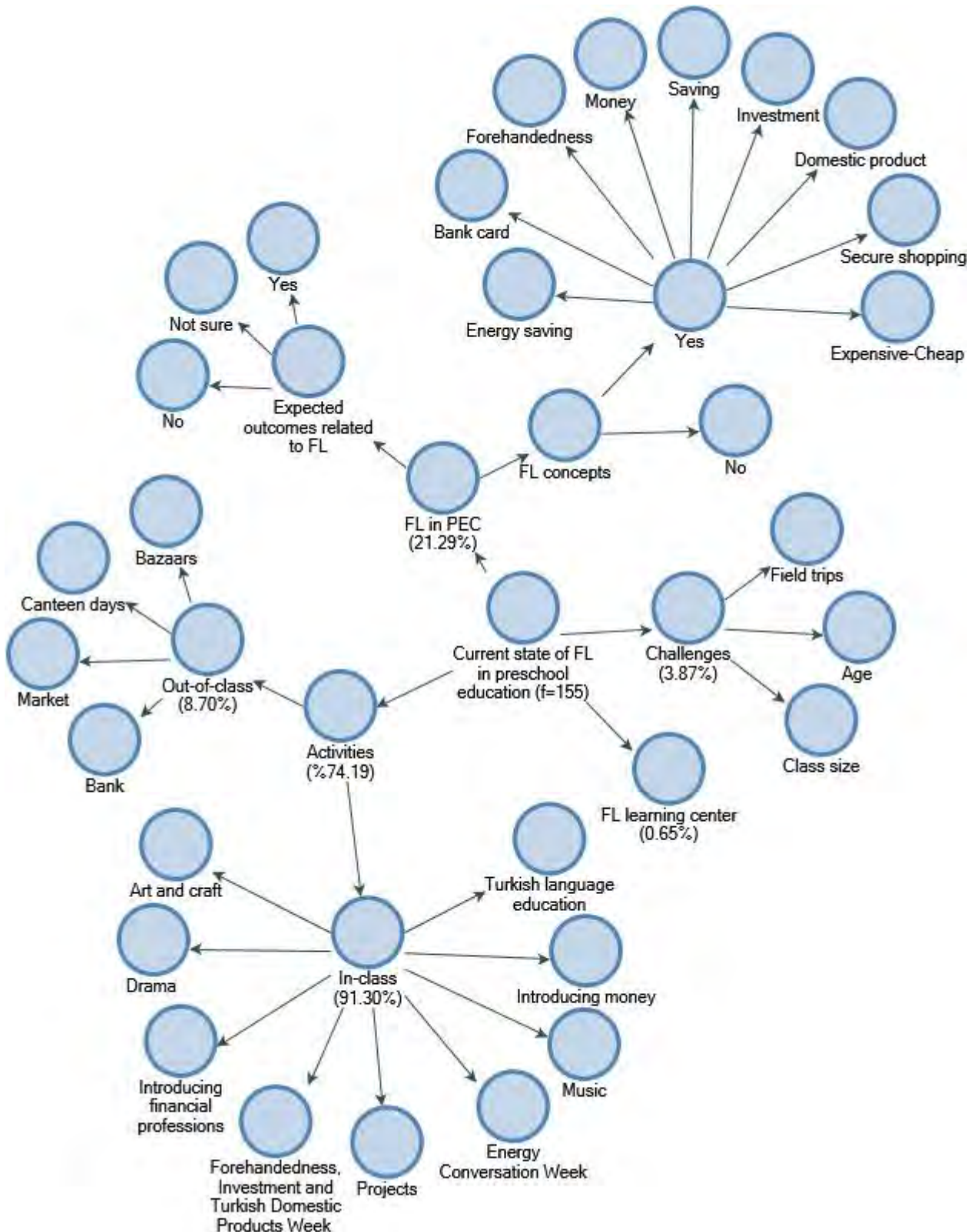


Figure 4. Preschool teachers' views on the current state of FL education in preschool education

The preschool teachers' views on FL education in PEC (21.29%) are categorized into two sub-themes as expected learning outcomes and concepts in Figure 4. In the expected learning outcomes sub-theme, there is an inconsistency among the preschool teachers' views because some of them stated that there have been

some outcomes on FL in the program; but some of them, on the other hand, stated that there has not been any specific outcome for FL education; however, some of them stated that they are not sure about there is any expected learning outcome on FL or not. Similarly, in the sub-theme namely concepts, some of the preschool teachers stated that there has not been any concepts on FL education in the program; however, some of the participant teachers stated there have been some concepts for FL such as energy-saving, forehandedness, loaning, investment, money, domestic products, cheap-expensive, bank card and safety shopping in the program. Hardly, when the findings presented in Table 2 are considered, it is understood that investment, cheap-expensive, bank cards and safety shopping are not included directly in the PEC, but taught by teachers as the concepts.

*K6. Surely there are some expected learning outcomes, these are about forehandedness, but we teach them in terms of values, it is a bit parallel issue, here.*

*K15. There is no outcome on FL in general outcomes. But for concepts, there are some concepts based on cheap-expensive.*

*K20. ... when we look at this issue, there is no concept on money, but there are some concepts about numbers, yet I think it should be integrated into the program.*

*K18. There is no concept based on FL, but we indirectly teach some concepts such as money, loaning in the Forehandedness Investment and Turkish Domestic Products Week.*

In the activities theme consisting of 74.19% of preschool teachers' views on the current state of FL education, 91.30% of the activities are gathered in-class activities as a sub-theme. In this theme, many of the preschool teachers stated that for FL in preschool education, they generally design some activities in Energy Conversation Week and Forehandedness, Investment and Turkish Domestic Products Week such as pointing the significance of saving money, water, energy and instruments, and making a moneybox, saving money in moneybox at home or in class. On the other hand, two of the preschool teachers stated they don't organize any activities for this week since they think that the activities designed in these weeks are not as suitable for the purpose of the Week. Even it is seen in Table 2 that Forehandedness, Investment and Turkish Domestic Products Week is not given a place in the PEC, the findings in Figure 4 show that this week is commonly presented by teachers in preschool education.

*K2. Early habits of children in these ages go on the same way. We just teach it in energy conversation week. We teach only we shouldn't turn on the water, we should put off the lights. Indeed, we teach these things every time. Additionally, we teach something on the use of our domestic products, manage money and to be forehanded in Turkish Domestic Products week. We do not teach any other concepts.*

*K5. We have not presented domestic products week for two years. I think it is not so useful since it is based on just consumption.*

*K14. I do making a moneybox activity in Forehandedness, Investment and Turkish Domestic Products Week. I want them to save money in their moneybox under the control of their parents... and buy some small presents with this money.*

*K4. In Turkish Domestic Products Week... at the same time, we teach barcodes of domestic products.*

Additionally, the preschool teachers indicated that they have used some activities such as reading stories or poems based on loaning in Turkish language education, drama and music lessons; project works like e-twinning and zero waste, doing art and craft activities like designing moneybox or imaginary money; and some activities on recognizing money as a term. The preschool teachers who have been teaching in younger groups stated that children cannot recognize money because of their cognitive development level; however, many of the other preschool teachers who have been teaching in 5-year-olds indicated that children could know money as a term. Some of the preschool teachers specified that children in older groups could recognize just coins as money, and some of the children could learn money with the help of interactive smart boards or toy money. Two of the participants indicated that they have teaching banking as a profession for a related job with FL, however, it is not on purpose of teaching FL concepts, but they teach this profession under the main theme of professions that are consisted in PEC if there are some bank employee parents incidentally in their target groups.

*K4. We design our own money ourselves or we may want them to color money pictures given as photocopies or papers.*

*K7. For instance, I sometimes bring some Monopoly money for shopping activities in class.*

*K12. For designing moneybox activity, children bring 1 Turkish lira, 25 or 50 kurus,... but there is no specific activity to identify money.*

*K13. We did not define money. We only say to children that they can save both coins and banknotes in their moneybox.*

In Figure 3, it is seen that there are some out-of-class activities on FL education apart from in-class activities, but at a rare amount (8.70%). Some of the preschool teachers stated that they have done some out-of-class but in-school activities like canteen days in schools; and these days teachers encourage children to shop at the canteen, even some of the teachers said that they want their students to use the wallet as a part of canteen day activity. Some of the teachers indicated that they visited markets, bazaars and banks in the past years, however, they have not visited these places nowadays. The views of the preschool teachers under the theme of challenges (3.87%) can show the reasons for not conducting out-of-class activities. Some of the preschool teachers who have been teaching in younger groups stated that out-of-class activities are not so meaningful for children, there are some handicaps for field trips and big class sizes make it harder for teachers; for this reason, they have not designed these activities even if they did them before. As different from the other teachers, one of the teachers remarked that there was not any FL learning center in preschool classrooms. This finding supports the findings presented in Table 2, however, it shows that teachers do not use the flexibility of the program on designing different learning centers as learning environments fostering FL.

*K11. To get them ready for real-life situations, to teach using money or knowing the value of money, we design canteen days for children. They bring money in their wallets, we go to the canteen in school, they line up there and then and pay money for shopping.*

*K5. Before, we went to a supermarket with an older group of children... but with a three-age group, it is difficult.*

*K1. They pay money is everywhere, in... bazaars, markets come to my mind, but we need to think about the safety of children, for this reason, we cannot put many of the activities in our mind into practice, unfortunately.*

*K12. We have not designed any learning center for FL education in our classroom until today.*

*K5. I designed a shopping center near the playing house, but I never think it was related to FL education.*

The findings of the preschool teachers' suggestions for FL are presented in Figure 5. It is seen in the figure that there are eight themes for the preschool teachers' views on suggestions for FL education in preschool education. As a parallel finding of Figure 2 stating lack of knowledge, in Figure 5, the theme on training preschool teachers for FL concepts is shined out as a finding. Under this theme, teachers suggested that this education should be conducted by experts in a way of supporting active participation, with the content of the meaning of FL, FL education in preschool education, designing FL activities for children and FL learning centers/environments in preschool education. Additionally, some of the teachers suggested additional content covering conscious consumption, budgeting and managing money to develop their own FL skills.

*K6. There can some seminars on what can be taught on FL or how it can be taught to children.*

*K20. Training can give us, new ideas on what can be done for different activities in terms of money or how activities can be enhanced on this concept.*

*K3. First of all, I would like to learn how I manage my own money because I always say that we cannot differentiate needs and desires in general.*

*K14. By the educations, FL skills can be spread to the society as starting with us.*



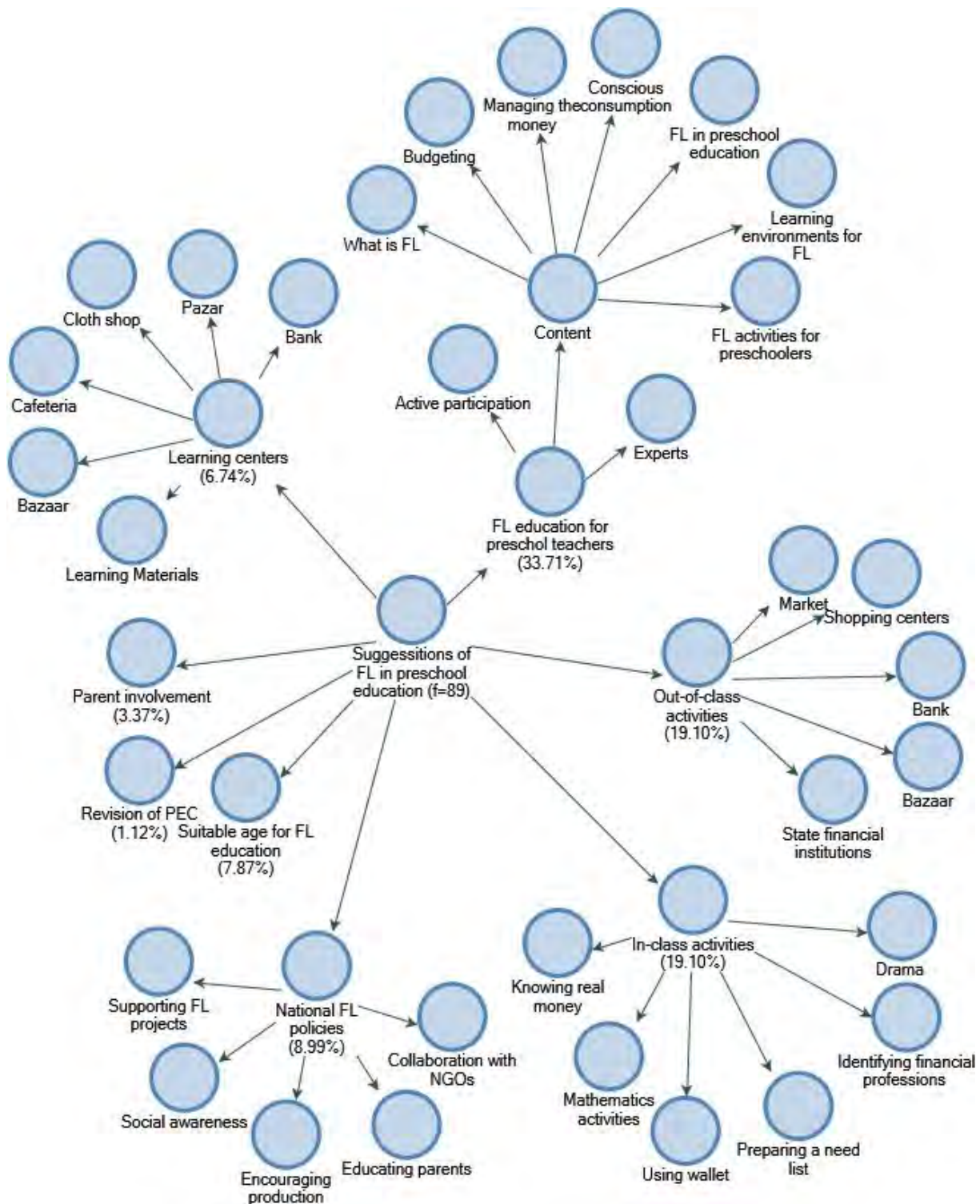


Figure 5. The preschool teachers' suggestions for FL in preschool education

The preschool teachers suggest that there can be some in-class activities such as using wallet, drama or mathematics activities, preparing a need list, knowing real money, and identifying some professions like banking, bookkeeping and work of tradesmen. As for out-of-class activities, some of the preschool teachers

suggest that there can be school visits to supermarkets, bazaars or shopping centers, theatres and cinemas; and banks or administration of finance in cities. Some of the preschool teachers who think FL education can be supported thanks to FL learning centers suggest in learning center theme (6.74%) that there can be some learning centers such as a bank, toy or cloth shops, cafeteria and bazaar in preschools, and there can be some toy-money or credit cards as real-like materials. As referring to the findings in Table 2 on the recommendation for designing different learning centers if needed, these findings show that teachers have the clear need to revise PEC with the perspective of FL.

*K9. Banks can be visited to see the actions here, bazaar shopping can be demonstrated.*

*K18. Until now, I don't think to visit banks. I will consider on visiting places that are related to the FL concept. ... maybe, I can invite a bank officer to class.*

*K12. In games, artificial money or expired credit cards can be used.*

Some of the preschool teachers who point out the importance of parents as models for financial issues to their children and maintaining FL education at home suggest that parent participation can be supplied (3.37%) for FL education in preschool education.

*K20. Even if we teach them in schools, these cannot be realized if parents do not support them at home.*

In age group theme (7.87%), some of the preschool teachers suggested teaching FL skills to 4-5-year-old children but not earlier than this age group.

*K20. Since money is an abstract term. As learning numbers, children can learn money as a usable term in 5-year-old.*

The views of the preschool teachers who think FL education should not be limited to preschool education are categorized into the theme namely developing national FL policies (8.99%). Some of the preschool teachers suggest that parents and society should raise awareness on FL concept; some others, also, suggest that production should be encouraged, teachers' projects on FL should be supported and there should be a collaboration between NGOs and schools.

*K17. There is a tendency of our society as I use it; if it remains, it remains; if it is not, it perishes. At heart, we need to raise awareness for our society.*

## DISCUSSION, CONCLUSION AND RECOMMENDATIONS

In this study which aims to analyze the current state of financial literacy in preschool education, at first, PEC is examined in terms of FL, and then the views and suggestions of preschool teachers on FL in preschool education are tried to be determined.

When the PEC is examined as a document, descriptive analysis findings show that there is no specific expected outcome on FL in PEC; however, there are 12 outcomes that are indirectly related to FL and only numbers (1-20) and money are determined as the concepts related to FL in the program. Similarly, there is no activity directly related to FL education; yet, there are some activities on preparation for literacy, mathematics and field trip activities supporting FL skills indirectly. Although the PEC suggests organizing learning environments under some thematic names as the learning centers, there is no learning center specified for FL in classrooms. Barely, in the PEC, it is also suggested that there can be different or new learning centers in case of necessity; in this sense, it is indicated in this study that PEC provided teachers the flexibility of designing different learning centers such as a bank, market, post office, restaurant, shopping center, etc. to develop FL skills of children in the class. Additionally, as referring 21 special days/weeks for preschool education, it is seen that there is a special week namely Energy Conversation Week for children, and also it is realized that there is another special week namely Forehandedness, Investment and Turkish Domestic Products Week that is commonly celebrated in preschools even if it is not included in the program, but the main purpose of this week is not based on FL skills. These findings make it harder to say that PEC that has been used since 2013 supports the development of FL skills of children. In their study on analyzing FL programs for preschoolers, Holden et. al (2009) state that there is a limited number of programs for preschool education; there is no combination of current FL education programs and children's cognitive development levels, and there is no consensus on effective methods for early financial literacy education. However, Fluch (2007) indicates that the main purpose of early childhood

education programs should be based on recognizing money with the help of a basic and enjoyable way. Council for Economic Education (2012) points that financial education starts in elementary schools in the USA, yet it should be started at earlier ages to present enough financial competencies for children. OECD suggests that financial education should start as early as possible to improve FL for children, and this education should go on during whole academic life as systematically. Additionally, it is stated that both teaching financial issues as a new lesson or integrating it into other lessons can be an effective way of financial education (OECD/INFE, 2015). Holden et.al. (2009) emphasize that financial concepts should be a part of preschool education as one of the most effective ways to teach these concepts to children. Although the studies show that FL should be presented in formal education as a planned way for early ages, the findings of this study indicated that the Turkish PEC is poor at developing the FL skills and it should be improved as soon as possible. The national strategy plan and eleventh development plan designed by the Capital Markets Board of Turkey (2014) aimed to improve FL as including financial issues in primary, secondary and higher education programs in Turkey. However, in a study completed after these decisions, Güvenç (2017) indicated that even if there are some expected learning outcomes related to FL in primary, secondary and high school programs, they are not suited to the needs of today's economy. It is aimed to integrate FL education into upper education programs even in an old-fashioned way; however, not giving preschool education a leading role in systematic education programs is accepted as an important deficiency for Turkey. The results of this study call for expanding FL education politics in a way of starting from preschool education and updating PEC in line with the needs of FL skills required in the modern world. The suggestions of Başaran and Ulubey (2018) on integrating financial literacy issues into PEC confirm the curriculum revision call of this study.

The findings that are determined via content analysis show that the preschool teachers' views on FL education in preschool are categorized under the themes namely the meaning of FL, FL education in preschools, the current state of FL and suggestions for FL in preschool education. The findings on the meaning of the FL indicate that nearly one-third of the participant teachers do not have any knowledge about FL; one-fifth of the teachers have never heard FL as a term before this study, and the others can define this term just as using some basic financial concepts such as money, financial issues, loaning or budgeting. Similar results can be true of other adult groups, teachers, or candidate teachers. In a study by Leumann, Heumann, Syed and Aprea (2016), the participants from different countries and different professions defined financial literacy as just budgeting, loaning, earning money, spending money, borrowing, preventing to borrow and managing to retirement. According to the results of a study conducted with 3009 adults by the cooperation of The World Bank and Capital Markets Board in 2012, many of the adults in Turkey have knowledge on basic financial concepts like interest and they could calculate basically; however, it was seen that many of the adults have low performance on financial issues requiring more knowledge and complex computational skills (TEDMEM, 2016). In a study conducted with Social Sciences teachers, Seyhan (2020) states that social science teacher can define financial literacy in terms of basic financial concepts, economic politics and interpreting financial developments; as for financial management, they can define it as budgeting, deciding on economical issues and managing money as general. Similarly, in the studies which aim to determine financial literacy knowledge of in-service teachers and candidate teachers, it is seen that the level of financial literacy is low in both groups (Lucey, 2008; Akhan, 2015; Lucey, Meyers and Smith, 2017). Not only teachers but also academicians have a low level of self-confidence in teaching financial concepts (Henning and Lucey, 2017). OECD suggests that teachers should be supported on training for financial issues, getting sources for these issues, being aware of the importance of financial education and teaching financial concepts as consistently (OECD/INFE, 2015). In their study realized in secondary schools, Deng, Chi, Teng, Tang and Chen (2013) announced that there is a positive correlation between teachers' financial abilities/knowledge and presenting an effective financial education in their classes. The findings of both this study and other studies stated above show that in-service and/or pre-service training on FL concepts is significant for teachers both as the practitioners and role models of financial literacy education in schools. It is seen that there are some websites in Australia, the USA, Japan, England, Estonia, Holland, Spain and Portugal on financial literacy programs and materials for teachers (Temizel and Özgüler, 2015; TEDMEM, 2016). In Turkey, with the cooperation of MoNE and TEB (Turkish Economy Bank), 1000 teachers have been trained to get a training certificate on FL education via "I Can Manage My Budget Project". In another study, with a protocol between the Turkish Economy Bank



and General Directorate of Vocational and Technical Education, there has been some training for teachers and students on FL concepts to inform them on some basic terms such as managing budgets, saving and investing issues and create common awareness on FL concepts (TEDMEM, 2016). There is no information about the disciplines of the participant teachers for that study; however, it is seen that in the financial action plan of Turkey, some basic financial issues are aimed to be improved for primary and secondary school teaching programs in general, and there is no mention about FL PEC.

Many of the preschool teachers in this study have not any knowledge about FL and many of them, only know the basic terms about FL. This result takes attention to the missed opportunities for FL education in Turkey. It is a well-known issue that the early childhood period is a “pivotal development window” (OECD, 2017b, p. 148). A qualified preschool education creates a strong foundation for children (Heckman and Masterov, 2007), it also positively affects the following stages of life (Heckman, 2008), academic success (OECD, 2020; IEA, 2013), and the quality of life in adulthood (García, Heckman, Leaf and Prados, 2017; Kagitcibasi, Sunar, Bekman, Baydar and Cemalcilar, 2009). Its benefits also for the society and economy are well known (Heckman, 2012; Kaytaz, 2005; Temple and Reynolds, 2007). The qualified FL education in preschool education is a gateway to create human resources demanded by modern complex economies. For this reason, developing preschool teachers and initiating the development of FL skills in preschool education can be one of the most promising politics for Turkey.

The preschool teachers think that early FL education is necessary for both individuals and the national economy because they believe that early learnings have more long-lasting effects. European Insurance Industry (2017) emphasized that FL concepts should be integrated into teaching programs to change the financial behaviors of people, and it should start in preschool education; as in this way, not just educated people but also a larger group of people can be affected by financial education. Studies show that very young learners can successfully learn some basic financial terms such as money, exchanging, investment, saving, unemployment, inflation and poverty, etc. with a well-designed financial education (Schug and Hagedorn, 2005) and they can survive as a productive and well-adjusted citizen in the complexity of economy and finance (Clark, Shug & Harrison, 2009)

In different studies, additionally, it is seen as important that getting financial education at early ages and attending some meetings about financial literacy components in school-parent environments are significant issues for acquiring financial competencies (Whitebread and Bingham, 2013; Racanello and Herrera-Guzman, 2014; Totenhagen, Casper, Faber, Bosch, Wiggs and Borden, 2015; Rudeloff, 2019). In Turkey, within the collaboration of the Central Bank of the Republic of Turkey (TCMB) and The Scientific and Technological Research Council of Turkey, a journal “Curious Juniors” which consists of shopping, loaning, kurus and moneybox concepts were delivered to preschoolers; again, with the collaboration of TCMB and TRT Kids TV Channel, some cartoons based on financial issues like “Kurus Family” were developed for children (Karataş, 2017). In the light of these findings, it can be said that the development of similar materials and activities for preschool education and the integration of FL in PEC can have an important role to improve both individual and national financial welfare.

The preschool teachers’ views on the current state of FL training in preschool education are gathered under the theme of the challenge in terms of FL training in PEC, activities, FL learning centers and FL concepts in preschool education. The preschool teachers think that there is no learning outcome related to FL in preschool education and this finding is parallel to the findings of PEC analysis. However, there are some hesitant preschool teachers for FL outcomes in the program; it can be reasoned by the lack of knowledge on FL concepts or not designing PEC with the perspective of improving FL skills. Additionally, the low level of benefiting from the PEC by preschool teachers can have a role in this case (Kılınç, Kurtulmuş, Kaynak-Ekici and Bektaş, 2021; Tican-Başaran and Ulubey, 2018). Similar to the outcomes, some preschool teachers think that there is no concept related to FL; some others think that there is only money as a concept for FL; and some preschool teachers say some terms which are not included in the program for FL. This finding shows that teachers have to digress from the program and there is a necessity to revise PEC. As considering the necessity of key partners’ suggestions for an effective financial education program (Lusardi, 2009), preschool teachers’ views play an important role in updating PEC.

The preschool teachers realize some in-class and out-of-class activities for FL concepts. It is understood that preschool teachers generally design some activities in Energy Conversation, and Forehandedness, Investment and Turkish Domestic Products Weeks as stressing the importance of using energy, water



sources, money and encouraging saving by some in-class activities such as saving money in a moneybox, e-twinning and zero waste projects, and reading poems and stories based on saving in terms of FL concepts. As it is suggested by Şimşek (2019), preschool teachers design some storytelling activities for FL education; however, the main purpose of these activities is not FL but teaching some values on saving. The preschool teachers design a limited number of out-of-class activities like canteen days for FL education, and they do not prefer visiting banks, bazaars, or markets because of some safety problems in terms of crowded classrooms at early ages. Another reason for not preferring out-of-class activity for FL education is children's readiness to understand financial concepts. Supporting this finding Sherraden (2013), stated that preschool teachers think that FL education is not suitable for children under five years of age. The limitation of the activities for FL in Turkish preschool classes can be derived from teachers' knowledge, attitudes, or pedagogical education in terms of FL. Some studies stated that teachers lack the knowledge and abilities on financial education although they were aware of the significance of financial education (Seyhan, 2020; Way and Holden, 2009). OECD (2015) reported that there are serious problems in terms of teachers' competencies for financial education in schools. In this sense, it can be said that there is a need for empowering preschool teachers on financial education for preschoolers.

The findings of this study show that preschool teachers do not design FL learning centers and they use a limited number of teaching materials for FL education. As stated before, this finding can be related to the preschool teachers' lack of FL learning centers in the PEC and not using the opportunity provided by PEC to be able to design different learning centers if it is needed. These findings show that there is a need for revision of the preschool education environment in a way of supporting FL. Opletalova's (2014) suggestion about using some materials like course books for FL education, methodological guides, web-portals, worksheets and technological devices for FL would lead the curriculum revisions.

The suggestions of the preschool teachers on FL training in preschool education are focused on FL education for preschool teachers and in-class or out-of-class activities; however, there are some suggestions on national politics, age groups, learning centers, parent involvement and PEC in terms of FL. Parallel to the findings of this study on the lack of FL knowledge of the preschool teachers, they suggest training the preschool teachers about FL. They suggest that this training should be presented by experts of FL education encouraging the active participation of teachers. Additionally, they proposed a content comprising the titles of FL; FL in preschool education; FL activities in preschool education; FL learning centers; teaching FL skills for preschoolers, and some self-development skills such as conscious consumption, budgeting, and managing money for teacher education. In the related studies, it is stated that the integration of FL education into teacher training programs is important to integrate financial education in school programs (Henning and Lucey, 2017), to develop suitable learning activities in terms of age groups (Adalar, 2019) and to improve the self-reliance of teachers on FL education (Quick, 2014). As referring to the findings of both this study and other related studies, it is understood that preschool teachers need to be supported on FL. For this reason, the integration of in-service and pre-service education on FL education into preschool teacher training programs is seen as a primarily preferred politics.

The preschool teachers suggest some activities such as using wallet, drama, mathematics, preparing need list, recognizing real money and presenting some professions like bank officer, accountant and tradesmen for in-class activities. As for out-of-class activities, some preschool teachers suggest visiting markets, bazaars, shopping centers; some others suggest visiting banks and financial services in cities. They also suggest that there can be FL learning centers such as a bank, toy-cloth shops, cafeteria and bazaars; and there can be toy money or expired credit cards as real-life materials. These findings show that preschool teachers need to revise learning centers from the FL perspective, considering the opportunity stated by the program on designing new learning centers in case of necessity.

The preschool teachers stated the importance of parents as being a model for financial issues and maintaining FL education at home. They suggest that parents should participate in FL training in preschool education. Likewise, PISA 2015 results show that students generally learn financial issues from their parents and the FL performance of students who have been talking on these issues with their parents is higher (OECD, 2017a.). Participant teachers think that FL education is not limited to preschool education. They suggest that national politics should be developed in terms of FL education; people in the society should raise awareness on FL concepts, production should be encouraged in the society; the projects on FL education for teachers should be supported and there should be a collaboration with NGOs. Te'eni-Harari

(2016) states that parent's and peer's attitudes and accessibility of money have important roles in children's saving perceptions. According to another study, parents' talking with children on managing money has a key role to affect children's financial knowledge and attitudes (Shim, Xiao, Barberve Lyons, 2009). In this sense, conducting FL education with school-parent collaboration helps to maintain this education more effectively. As consisting of some financial concepts such as introduction to finance, budgeting, loaning, saving, credit and credit card; the source namely "Financial Literacy" which was developed by the Ministry of Family and Social Politics in 2011 for the content of Family Education Program is a keystone for the further studies. Educating parents for financial issues and preparing easily reachable materials, contents and handbooks for families are important.

In conclusion, the study showed that Turkish preschool education is not supportive of financial literacy both in terms of curriculum and the teachers. Both the findings of this study and other related studies state the necessity of providing FL education at early ages in a systematic way. For a systematic FL education in Turkey, firstly, the Turkish PEC needs to be revised in terms of current national action plans. No later than the revision of the PEC Turkish national action plan in which there is no place for FL education should be revised. Preschool teachers must be supported in terms of FL education, learning centers should be designed on FL skills for preschoolers, learning environments in preschool education should be enriched in terms of contents and materials, out-of-class activities should be designed to teach financial processes to children. For this reason, it is useful to think that FL education is a process that can be realized not only by the efforts of schools but also by a collaboration of parents and financial institutions.

Although this study is limited to 20 preschool teachers in the west side of Turkey, it is thought that this study can give an idea on early FL education in Turkey as a country implementing a central preschool education. However, duplicating this study with larger groups and different research methods is thought as useful for further studies.

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