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SOSYAL BİLİMLER ENSTİTÜSÜ
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THE ROLE OF THE LANGUAGE APTITUDE AND SELF-REPORTED STRATEGY USE ON THE ACHIEVEMENT OF EFL LEARNERS

YÜKSEK LİSANS TEZİ

Gamze YAVAŞ ÇELİK

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Tez Danışmanı
Dr. Öğr. Üyesi Fatih YAVUZ

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BALIKESİR ÜNİVERSİTESİ
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Enstitümüzün Yabancı Diller Eğitimi Anabilim Dalı'nda 201712553003 numaralı Gamze Yavaş Çelik'in hazırladığı "The Role of the Language Aptitude and Self-Reported Strategy Use on the Achievement of EFL Learners" konulu YÜKSEK LİSANS tezi ile ilgili TEZ SAVUNMA SINAVI, Lisansüstü Eğitim Öğretim ve Sınav Yönetmeliği uyarınca 12 Haziran 2019 tarihinde yapılmış, sorulan sorulara alınan cevaplar sonunda tezin onayına OY BİRLİĞİ / ~~OY ÇOKLUĞU~~ ile karar verilmiştir.

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Yukarıdaki imzaların adı geçen öğretim üyelerine ait olduklarını onaylarım.

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Müdür

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Language learning is a complex process which is affected by many different factors. Identifying these factors to find out the solutions to the problems of both learners and teachers is the focus of the language learning and teaching process. Individual differences such as aptitude, strategy use, motivation, anxiety and attitude are among the core components of these factors. Understanding the effects of these differences on the learning and teaching process enables the teacher to help the learner in this complicated and challenging process.

With the changing aptitude perspective after the 90s, aptitude is regarded as one of the theories in SLA. Determining the learners who can learn a foreign language in a short time or identifying the learners' strategies that they use during the learning process assists the teachers in planning their lessons according to their students' learning styles. With the courses prepared in this way, it is possible for the students to learn more quickly and to be more successful. It will also contribute to the identification and quick training of those who will get significant responsibilities in the governmental organizations or the people who need to learn a foreign language for their occupations.

However, language aptitude is an ignored issue in our country due to the lack of tests to measure the language aptitude of the Turkish EFL learners. Therefore, this thesis investigates the effects of language aptitude and strategy use of the Turkish EFL learners on their achievement with the help of a language-neutral aptitude test developed in 2005. I hope that it will contribute to the studies about the identification and training of the people who need to learn a foreign language in a short time and the development of new aptitude tests in Turkey.

First of all, I would like to thank my advisor Asst. Prof. Dr. Fatih Yavuz for his counselling and contributions throughout my study.

I would also like to thank all my teachers for their contributions through my undergraduate and graduate education.

Finally, I would like to express my gratitude to my family for their priceless support and love.

Gamze Yavaş Çelik

ÖZET

İNGİLİZCEYİ YABANCI DİL OLARAK ÖĞRENEN ÖĞRENCİLERİN BAŞARILARI ÜZERİNDE DİL ÖĞRENME YATKINLIĞI VE STRATEJİ KULLANIMININ ETKİSİ

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Tez Danışmanı: Dr Öğretim Üyesi Fatih YAVUZ

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Başarının dil öğrenme yatkınlığına bağlı olup olmadığı ya da dil öğrenmeye yatkınlık testlerinin başarıyı tahmin edip edemeyeceği İkinci Dil Edinimi'nin tartışmalı konularından biridir. Yatkınlık ve ölçülebilirliği üzerine sadece dil öğreniminde değil pek çok alanda, özellikle de psikolojide, çalışılmıştır. Zekâ ile yatkınlık arasındaki fark ve yatkınlığın başarıya olan etkisi araştırmacılar tarafından sorgulanmış ve zaman içerinde pek çok yetenek testi geliştirilmiştir; çünkü dil öğrenme yatkınlığını ölçmekteki başarı ya da başarının tahmin edilebilmesi, dil öğreniminde zaman kazanmak demektir. Ayrıca son yıllarda değişen dil yatkınlığı anlayışı ile birlikte, strateji kullanımı, motivasyon ve kaygı gibi bireysel farklılıkların dil öğrenimindeki önemi de göz önünde bulundurulmaya başlanmıştır. Bu çalışmalar sayesinde, öğrencilerin yatkınlık seviyeleri ve diğer bireysel farklılıklarına göre hazırlanan ders anlatımlarıyla başarıyı arttırmak amaçlanmaktadır. Bu sepeble, bu çalışmanın amacı dil öğrenme yatkınlığının strateji kullanımı ve başarı üzerindeki belirleyiciliğini görmek için anadili Türkçe olan öğrencilerin dil öğrenme yatkınlıkları, öğrenme stratejileri ve başarıları arasındaki ilişkiyi bulmaktır. Yaşları 18 ile 22 arasında değişen 152 üniversite öğrencisine LLAMA dil öğrenme yatkınlığı testi, SILL strateji anketi ve bir seviye belirleme testi uygulanmıştır. Sonuçlar dil öğrenme yatkınlığının yabancı dil öğrenme başarısı üzerinde etkili olduğunu göstermiştir. Bununla beraber, katılımcıların LLAMA testine göre belirlenen yatkınlık profillerine ve seviye belirleme testindeki seviyelerine göre hangi öğrenme stratejilerini kullandıkları belirlenmiştir.

Anahtar Kelimeler: Dil öğrenme yatkınlığı, Dil öğrenim stratejileri, Başarı, Bireysel farklılıklar, Yabancı dil olarak İngilizce

ABSTRACT

THE ROLE OF THE LANGUAGE APTITUDE AND SELF-REPORTED STRATEGY USE ON THE ACHIEVEMENT OF EFL LEARNERS

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Master's Thesis, Department of English Language Teaching

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Whether the success depends on language aptitude or the language aptitude tests can predict the language learning achievement is one of the contradictive issues in SLA. Not only in language learning, but in many fields, particularly in psychology, aptitude and its measurability have been studied. Scholars have questioned the difference between the intelligence and aptitude and the effect of aptitude on success and many language aptitude tests were developed in time; because the success in aptitude measurement and the achievement prediction would mean to gain time in language learning. In addition, with the changing understanding of aptitude in recent years, the significance of individual differences such as strategy use, motivation and anxiety began to be considered in language learning. Thanks to these studies, it is aimed to increase success by designing instructions according to students' aptitude and other individual differences. Therefore, this study aimed to find out the relationship between language aptitude, self-reported strategy use and language achievement of the Turkish EFL learners to see the decisiveness of language aptitude on strategy use and achievement. 152 university students between the ages of 18-22 were administered LLAMA aptitude test, Strategy Inventory for Language Learning (SILL) and a placement test. Results showed that language aptitude influences foreign language learning achievement. Besides, the self-reported strategy use of the participants was found out according to the aptitude profiles determined by LLAMA and success levels determined by the placement test.

Keywords: language aptitude, language learning strategies, achievement, individual differences, EFL.

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LIST OF ABBREVIATIONS

ID : Individual Differences

MLAT : Modern Language Aptitude Test

PLAB : Pimsleur Language Aptitude Battery

Hi-LAB : High Level Language Aptitude Battery

DLAB : Defence Language Aptitude Battery

CANAL-FT : Cognitive Ability for Novelty in Acquisition of Language (Foreign) Theory

LLAMA : Language Aptitude Test

SILL : Strategy Inventory for Language Learning

L1 : First Language

L2 : Second Language

DTI : Diffusion Tensor Imaging

EFL : English as Foreign Language

ESL : English as Second Language

OPT : Oxford Placement Test

ATI : Aptitude Treatment Interaction

SLA : Second Language Acquisition

PS : Processing Speed

PWMC : Phonological Working Memory Capacity

PWMS : Phonological Working Memory Speed

NTG : Noticing the Gap

MGS : Memory for Contingent Speech

DSP : Deep Semantic Processing

MCT : Memory for Contingent Test

MRR : Metalinguistic Rule Rehearsal

LTM : Long Term Memory

STM : Short Term Memory

FSI : Foreign Service Institute

CIA : Central Intelligence Agency

ILR : Interagency Language Roundtable

FBI : Federal Bureau of Investigation

DLI : Defence Language Institute

NSA : National Security Agency

EMLAT : Elementary Modern Language Aptitude Test

SPUD : Speech Perception under Distraction

Tc : Temporal Tracking

MAJR : Maintaining and Judging Rhythm

DASP : Discrimination among Sound Patterns

DOD : Department of Defence

ALAT : Army Language Aptitude Test

DLAT : Defence Language Aptitude Test

IQ : Intelligence Quotient

HABLA : Horne's Assessment of Basic Linguistic Abilities

AFLAAT : Al-Haik Foreign Language Auditory Aptitude Teste

CFT : Culture Fair Test

CMT : The Concept Mastery Test

LAT : Language Aptitude Test

MM&L-D : Meara, Milton & Lorenzo-Dus

GAMA : General Ability Measure for Adults

SRT : Probabilistic Serial Reaction Time Test

OSPAN : Operation Span Test

ELA : Explicit Language Aptitude

ILA **:** Implicit Language Aptitude

CEFR **:** Common European Framework

ALTE **:** Association of Language Testers in Europe

IELTS **:** International English Language Testing System

TOEFL **:** Test of English as a Foreign Language

TOEIC **:** The Test of English for International Communication

ESOL **:** English for Speakers of Other Languages

ESP : English for Specific Purposes

MD : Mean Difference

1. INTRODUCTION

Language learning is a complex process affected by many different factors such as the complexity of language itself as a linguistic form (VanPatten & Smith, 2015), individual differences of learners and type of instruction. All these variables have been discussed separately for many years, and they all have particular importance in language learning.

However, individual differences (ID) constitute the most crucial part of these factors (Ellis, 1994, p: 471). Therefore, ID have been analysed for many years by researchers despite the difficulties in defining and grouping. It is challenging to define and group ID because they all depend on the nature of the learners. Nevertheless, that does not mean that there are as many variables as learners. People's characters are not the combination of free features; they are a harmonised entity (Snow, 1992). Hence, ID can be generally listed as age, gender, aptitude (Carroll & Sapon, 1959), personality (Brown, 1973; Ehrman, 1990), attitude, motivation (Gardner & Lambert, 1972; Gardner, 1985; 1990), cognitive style (Carroll & Maxwell, 1979; Ellis, 1994; Larsen-Freeman & Long, 2014), learning strategies (Oxford, 1990; Skehan, 1991) and anxiety (Horwitz & Cope, 1986).

Findings of research about ID also have great importance for the other variables such as the type of classroom instruction. Finding the compatible method to the learners' differences facilitates the learning process. For instance, knowing the learners' strategies help a teacher decide the type of instruction (Oxford, 1990). Similarly, aptitude functions differently in various instructional settings (Erlam, 2005; Robinson, 2007). Hence, it is necessary to determine the level of aptitude and types of strategies that learners have besides detecting the instructional settings that correlate them. By this way, it can be possible to guide the learners to make the process less complicated for them.

In this respect, the primary focus of this study is on aptitude and strategy which are regarded as among the core components of individual differences of learners with their pertinence in language acquisition and learning (Skehan, 1991). It aims to find out the relationship between language aptitude, learning strategies and academic achievement of learners regarding their measurability. There are lots of assessment tools to identify the aptitude (MLAT, PLAB, HILAB, DLAB, and so on) and strategy (interview, questionnaires, journals, and so on) of the learners. However, only the Language Aptitude Test (LLAMA) can be used by the native Turkish speakers because of its language-neutral facility. Therefore, this study compares the results of the Strategy Inventory for Language Learning (SILL) prepared by Oxford (1986) and Language Aptitude Test (LLAMA) prepared by Meara (2005) with Oxford Placement Test (OPT). It aims to find out their foreseeability about determining the foreign language level of learners and the possibility of their usage as a placement test for foreign language learners.

In the introduction part, brief information about the historical progression of the problems related to 'language aptitude', 'learning strategies' and their reflections on Turkey was presented first. After constituting the basic discussion pattern about problems, the aim and significance of the thesis and research questions were explained in the 'Purpose and Significance of the Study' part. At the end of the section, the limitations of the study were stated.

1.1.Problem

1.1.1. Problems with 'Language Aptitude'

It has concurred that all components of ID have a significant effect on foreign language learning. On the other hand, aptitude- one of these components- is one of the most contradictive ones. Although it is defined as being unaffected by environmental factors (Carroll, 1981) and unconnected with other effective and cognitive aspects (Li, 2016), it is also defined as a factor determining some components such as learning strategies and styles (Skehan, 1991). Besides, it is defined as a predictor of general L2 competence (Carroll, 1990) and it determines the competency in both native (L1) and second language (L2) learning (Skehan, 1986). From the 20s (Stoddard, 1928; Stoddard & Vander Beke, 1925) to the present day, many studies have been carried out, and the idea of whether aptitude is important in

language acquisition has varied. Aptitude, which gained importance with the development of Carrol's Modern Language Aptitude Test (MLAT) in the 60s, encountered Krashen's criticism in the 80s and lost its importance (Krashen, 1981). Higgs and Krashen (1983) evaluated the term 'aptitude' only by grammatical sensitivity and claimed that it was valid only in instructional environments for conscious learning and had no effect on natural communicative settings. However, the studies carried out in the 90s brought up back the thesis that aptitude was important in terms of language learning, but this time, the researches were continued considering other variables. Snow (1991) uniquely defined the aptitude within Aptitude-Treatment Interaction approach as not independent from affective and cognitive factors. This conceptualisation is very different from Carrol's (1981), and it also reflects the perspective of educational psychology.

Furthermore, Skehan (2016) considers aptitude in language learning as one of the theories of language acquisition and in the centre of the acquisition process, rather than being marginal and merely as a predictor. On the other hand, dilemmas continue about aptitude at present. VanPatten & Smith (2015) asserted that the significance of aptitude in language acquisition should be narrowed only for explicit rule learning.

This variable perspective stems from the differences in the theories accepted by the researchers (Ellis, 1994). The behaviourist and cognitivist perspectives led to the interpretation of 'aptitude' as consistent, unaffected and precisely measurable in the 60s (Robinson, 2007). Therefore, in the 70s, when the communicative approach was predominant, there was a rapid decrease in aptitude research. As Affective-Humanistic Approach (Celce-Murcia, 1991) and Whole-person learning gained importance in the 90s, researchers began to evaluate 'aptitude' from a different perspective. For instance, Snow (1991) defines the persons as whole beings and correspondingly defined the aptitude not a monolithic factor, on the contrary as affected by personality, emotion, style, motivation and beliefs.

Skehan (1991) mentioned two different approaches in psychology with their pros and cons as experimental and differential. In the light of the differential one, he claimed that 'aptitude' should be reconsidered in natural and varied settings and

basic principles of evaluation should be changed to make aptitude an appropriate predictor in language learning.

By taking Skehan's (1991) advice into account, researches have begun to shape in an interventionist way. Ellis (1994) also stated that Confirmatory research - which has an interventionist character - is more appropriate than Naturalistic research for the studies of ID. After this time, many researches were shaped in instructional settings where type of instruction (explicit or implicit process, artificial language, task design, feedback, learner attention) was questioned with individual differences (DeKeyser, 1997; Hulstijn, 1997; Robinson, 2007, Ellis, 2005; Egi, Fujii, & Tatsumi, 2002; Sáfár & Kormos, 2008). Nowadays, aptitude was conceptualised as a changing and probably trainable factor (Sternberg, 2002). In addition, neurolinguistic studies have been performed about aptitude in the 2000s. Catani, Allin, Husain, Pugliese, Mesulam, Murray & Jones (2007) found out a relationship between the structural differences in the connections of two territories of the brain (Broca's and Wernick's territories) and the cognitive function for language learning performance. Similarly, Xiang, Dediu, Roberts, Norris, & Hagoort (2012) investigates the relationship between the anatomical facilities of the brain and four components of aptitude by using LLAMA (Language Aptitude Test) and Diffusion Tensor Imaging (DTI) and reported significant correlations.

To sum up, aptitude is regarded as a vital component in the language learning process from different perspectives. Recently, studies on 'aptitude' have grown up around the theme of explaining the relationship of 'language aptitude' to the other 'individual differences and classroom instruction types, not only predictiveness of aptitude for language learners' achievement.

1.1.2. Problems with Learning Strategies

The success of individuals in language learning varies, although sometimes they share the same instructional environment. The differences in the characteristics of students, such as aptitude and attitude, affect the rate of strategy use of learners (Bialystok, 1978). These differences have revealed the necessity of investigation the methods that are followed by successful language learners and these methods are called language learning strategies. First studies about learning strategies were shaped to determine the strategies used by the successful language learners

(O'Malley, Chamot, Stewner-Manzanares, Russo and Küpper, 1985). Rubin (1975) describes the good language learners and the strategies used by them. Oxford (1994) defines foreign or second language learning strategies as attitudes and methods employed by learners purposely to develop their improvement in performance, understanding and internalising the L2.

Whether the methods used by the successful learners can be taught to other students or not, in this way, whether the success rate of unsuccessful students can be increased constitutes the basis of learning strategy research in the later period. For this reason, strategies were grouped by researchers. The grouping made by O'Malley, Chamot, Stewner-Manzanares, Russo and Küpper (1985) and Oxford (1990) resembles each other. Oxford (1990) classified the learning strategies under two main titles 1) Direct Strategies and 2) Indirect Strategies. Direct Strategies were listed as memory strategies, cognitive strategies, and compensation strategies. Indirect Strategies are metacognitive, affective and social strategies.

Grouping of learning strategies assist the researchers in determining the strategies used by target groups and also to form the instructional settings that will be compatible with the strategies used by learners in the target group. Felder & Henriques (1995) states that the extent to which the students are successful depends on their aptitudes, their readiness and the harmony of their strategy use with the instructional method applied in the classroom.

In order to determine the strategies used by learners, there are many ways. Chamot (2005) counted the self-reports, which include think-aloud protocols, questionnaires, written diaries, journals and interviews as the unique way to determine the unobservable strategy use of learners, despite their restrictions.

Oxford (1996) and Chamot (2004) mentioned questionnaires as the most robust and inclusive methods to evaluate the learners' language learning strategies. One of the most extensively utilised questionnaires, Strategy Inventory for Language Learning (SILL) was formed by Oxford (1986), and Oxford (1996) stated that validity of the SILL depends on the course grades and standardised test results and reliability depends on the application of it to many different cultures.

Therefore, in this study, SILL questionnaire results were compared to the Oxford Placement Test in order to find out the relationship between achievement level and strategy use in the Turkish context. Furthermore, strategy use of the learners was compared to each subtest of LLAMA.

1.1.3. Problems about aptitude in Turkish Context

Since the development of MLAT, many language aptitude tests were generated by the researchers. Many of them based on the main principles of MLAT, but each researcher tried to eliminate the drawbacks according to their perspectives that stem from the perception of their language learning. For instance, the language of the test is one of these drawbacks. MLAT only has a few versions such as English and Spanish. In order to take the MLAT test, either the participant should be an English native speaker, or he/she should know advanced level English. There is no Turkish version of MLAT or any other aptitude tests. For that reason, none of them could be used by the native Turkish speakers until the development of LLAMA in 2005 -a language neutral test (Rogers, Meara, Barnett-Legh, Curry & Davie, 2017).

Researches can only be conducted after this time with the application of LLAMA test on native Turkish speakers. Therefore, studies about Turkish native learners' language aptitude are limited. One of these studies analyses the correlation between working memory and aptitude (Yalçın, Çeçen & Erçetin, 2016) and another investigates the relationship between individual differences – aptitude and motivation- and two grammatical structures – easy and difficult (Yalcin, 2012). There is one more research made by Yilmaz & Grañena (2016) about the function of cognitive ability under explicit and implicit feedback. On the other hand, in the study of Yilmaz (2012), Turkish was the target language. Participants were English native speakers, and they were never received Turkish input before. The study investigates the function of working memory and language analytic ability regarding explicit and implicit feedback. LLAMA was used in all these studies.

1.1.4. Purpose and Significance of the Study

In the light of the literature, it can be said that foreign language learning aptitude as an individual difference is a neglected subject in Turkey since a Turkish language learning aptitude test is not developed or there is no Turkish version of the

existing aptitude test until the development of the language-neutral test LLAMA in 2005. Accordingly, this study aims to investigate the connection among language learning aptitude, language learning strategy use of Turkish EFL learners and their achievement level to identify the foreseeability of these tests for determining the foreign language achievement of the Turkish EFL learners.

Specifically, the following issues are addressed:

1. What is the relationship between language aptitude and the achievement (placement test scores) of the learners?
2. Is there any relationship between the learners' self-reported strategies and achievement scores?
3. What strategies did the participants report based on their language aptitude and achievement levels?
4. What is the relationship between achievement, self-reported strategies based on the clusters determined by the LLAMA tests?
5. What are the underlying reasons in the increase and decrease in OPT scores other than the effect of aptitude scores and strategy use?

Quantitative and qualitative methods were employed in this research. Quantitative data for this study were collected by using language aptitude test LLAMA, Oxford Placement Test and Strategy Inventory for Language Learning (SILL). First, students were administered LLAMA to assess their language aptitude level in four subcomponents: vocabulary learning, sound recognition, sound-symbol correspondence and grammatical inferencing. Next, same students were also administered the Oxford Placement Test (OPT) which consists of two parts: grammar and listening. OPT scores of the participants were compared with the subtests of LLAMA. Then, the overall success of the learners taken from both grammar and listening was compared with strategy use of the learners determined by the SILL. Besides, strategy use of learners was compared to aptitude profiles of the participants determined by LLAMA and achievement level determined by OPT to have an idea about the decisiveness of aptitude and achievement on strategy use of the learners. Furthermore, after the quantitative data analysing process, qualitative data were collected through a semi-structured interview with the outliers of the study in order

to find out the other underlying reasons behind the increase and decrease in OPT scores that are not related to aptitude level and strategy use.

The present research explores, for the first time, the connection between aptitude and strategy use of the Turkish EFL learners. Understanding the link between aptitude and strategy use of the learners and also the connection of these individual differences with success will contribute to the language learning process both in terms of learners and teachers. Whether it will be possible to guide the learners about their achievement level in language learning with the help of the data taken from LLAMA and SILL or not is a critical question which saves time and energy for both learners and teachers.

1.2. Limitations

The reader should bear in mind that it is entirely hard to say that research can observe the real mental process of the learners with the help of a test or questionnaire, even though questionnaires are the most useful way (Purpura, 1997). The focus of this study is aptitude and strategy use of learners which are two controversial mental processes of learners in the sense of their measurability. Moreover, it is quite challenging to match the equal parts of tests used for individual differences with the components of the learners' achievement test. This comparison requires clear discrimination of the compatible parts of these tests because each subtest corresponds to another subtest of the tools used in the research.

Another issue is that LLAMA is not a standardised test yet. However, the validity study was made by Rogers, Meara, Barnett-Legh, Curry & Davie (2017). It is a computerised aptitude test; for this reason, some students who have problems with using a computer had difficulty in responding to the test. This matter may partly affect the results of the test.

1.3. Outline of the Thesis

This thesis divided into six distinct sections. The first section is an introduction, which presents the crucial issues about the core components of the thesis – aptitude and strategy use- and the aim of the current study. The second section is a literature review, which gives detailed information about the researches on language aptitude and language learning strategies. Language Aptitude part

defines language learning aptitude and explains the language aptitude tests comprehensively from past to present. Strategy use part defines the strategy use of learners and explains the assessment types of language learning strategies. The third section is methodology, which stated the research design, participants, procedure and tools of the present study. The fourth section of the thesis demonstrates the results of the current study by clarifying five research questions. The fifth section of the thesis asserts the conclusions deduced from the findings of the study and the last section suggests ideas for implications and further research.

2. LITERATURE REVIEW

This part reviews the literature comprehensively and consists of two main chapters: language aptitude and language learning strategies.

2.1. Language Aptitude

2.1.1. The conceptualisation of Aptitude and Aptitude Theory

In order to understand the concept of "aptitude", the historical process should be analysed in a detailed way. Today, "aptitude" is defined as "instinctive competence to do something" in the Oxford dictionary. However, Snow (1992) mentions about the origins of the word and states that it comes from Latin by way of French – connected with "apropo"- and implicates the interchange between person and situation and its meaning cannot be restricted to the cognitive facilities, but it besides involves conative and affective abilities. Corno, Cronbach, Kupermintz, Lohman, Mandinach, Porteus & Talbert (2001) mention the perspectives, definitions and suggestions of Confucius, Yue-Zheng, Socrates, Plato and Aristotle that explain the importance of aptitude.

Aptitude was defined by Snow (1992) as the first condition of learners that shapes the later stages of their improvement. Snow (1992) also mentions about the deficient or false association of the "aptitude" term with intelligence and capacity in the 17th- 18th century. Furthermore, he states that aptitude mislaid its authentic meaning in English and "readiness" term acquired its meaning. Aptitude was used in the meaning of "intelligence", readiness was used as "aptitude". This inaccurate description of "aptitude" caused a croaked perception of the term as only a prediction tool by testing in the 20th century. Kormos (2013) states that this meaning "readiness" was replaced by "competency to achieve a foreign language" with the research analysed the connection between aptitude components and achievement such as Grigornko, Sternberg & Ehrman (2000) and Kiss & Nikolov (2005). Kormos (2013) also states that a continuing argument in the field of SLA is the deficiency of

a distinct interpretation of language learning aptitude which stems from the empirical psychometric approach adopted by the language aptitude test developers and gives the MLAT as an example.

Another critical issue in the conceptualisation of aptitude is the terms related to aptitude: ability, achievement and intelligence. These terms - "aptitude, ability and achievement"- were openly defined by Carroll (1993). Ability was defined as stable and potential differences that people show in the face of a liminal difficulty. Aptitude was defined as the beginning condition of a person's preparedness, eagerness and competence for learning a foreign language. In this context, Wen, Biedroń & Skehan (2017) states that aptitude and ability seems synonymous, and ability is an aptitude provided that it forecast the amount and acceleration of learning and, although "achievement" and "aptitude" terms differentiated by Carroll, achievement evaluation can sometimes be regarded as aptitude evaluation in cases where the achievement can anticipate the expected improvement.

Wen, Biedroń & Skehan (2017) defines the foreign language aptitude as a term grounded in educational psychology, applied linguistics, cognitive psychology and cognitive neuroscience. Since the definition has been shaped with an interdisciplinary approach from the beginning, it is continually changing.

2.1.2. Intelligence and Language Learning Aptitude

The extent to which "intelligence" and "language aptitude" are linked to each other, or in which aspects the language aptitude is unique, is a matter to be defined in the conceptualisation process of aptitude. Skehan (1998) states that intelligence is not entirely different from aptitude, but it is not possible to say they are the same because they donated disconnectedly as an indicator of language learning achievement. In order to understand the relationship between intelligence and language learning aptitude, it is necessary to know the components of both intelligence and aptitude.

Intelligence generally defined as an adaptation to the environment. Sternberg (1997) asserted that this adaptation is a vital subject matter even in definitions of the originators of intelligence testing –Binet and Simon and Wechsler. Nevertheless, he states that people not only adjust to the environment but also alter it. Therefore, Sternberg (1999) defines intelligence as one's ability to accommodate to, form and

choose the environments by using his or her analytic, creative and pratic aspects in harmony to improve weaknesses. Cattell (1957) mentions two types of components in intelligence: crystallised and fluid. Carroll (1993) introduces three levels of intelligence: Stratum III: the general level, Stratum II: the broad level and Stratum I: the specific level. Cattell's crystallised and fluid intelligence are listed under the broad level. These are also the most significant cognitive components of aptitude (Kormos, 2013).

Snow (1992) categorises aptitude constructs under five main titles: conceptual structures, procedural skills, learning strategies, self-regulatory functions and motivational orientations in order to provide a pattern which guides the research plan. Conceptual structures are matched with crystalised intelligence and procedural skills- learning, thinking and reasoning- are matched with fluid intelligence and visualisation skills. These two categories are called Cognitive while self-regulatory functions and motivational orientations are called Conative. Learning strategies are defined as a mixed one. This classification is necessary to understand the aptitude complexes, aptitude-treatment interaction and the role of working memory in aptitude theory.

2.1.3. Aptitude Complexes and Aptitude-Treatment Interaction (ATI)

Instructional psychology and psychotherapy (Snow, 1991; Snow, 1992; Cronbach, 1957) were more organised than SLA about the studies that research the impact of individual differences in cognitive abilities on the learning process in different situations (Robinson, 2001;2002). Snow (1991) states that the current interpretation of ATI came from Cronbach (1957) and explains the aim of the ATI approach as planned to consider individual differences methodically in treatment development. He defines aptitude constructs as possible terms intended to define noticed characteristics of person-situation cooperation. Snow also explains the improvement of "aptitude complexes" idea which emanated from the identification of the interplay between various aptitude mixtures and same treatment variation. Therefore, Snow (1992) suggests that people accomplish when they are in consistency with the learning condition in terms of cognitive, conative and effective aspects.

Robinson (2001;2002) states that Snow (1994) and Carroll (1993) ranked the cognitive abilities and established a pattern of them. These patterns categorize the first-order abilities - working memory, capacity, analogical reasoning - , second order abilities – fluid intelligence (Gf), broad speediness (Gs), crystallized intelligence (Gc) – and third order - general intelligence (g), and he asserts that initial tests of language learning aptitude partly depends on these patterns. Aptitude complexes or a group of cognitive abilities unlikely associated with language learning under various psycholinguistic processing conditions. Hence, it is vital to explain the effects of individual differences in different learning situations in order to shape a complete SLA theory (Robinson, 2001; 2002).

In light of the aptitude complexes concept, Robinson (2005) reveals the Aptitude Complexes Hypothesis. In the centre of this hypothesis, there are necessary cognitive abilities such as processing speed (PS), phonological working memory capacity (PWMC), and phonological working memory speed (PWMS). In the second circle, there are five aptitude complexes: Noticing the Gap (NTG), Memory for Contingent Speech (MGS), Deep Semantic Processing (DSP), Memory for Contingent Test (MCT), and Metalinguistic Rule Rehearsal (MRR). The third circle consists of Task Aptitudes, and the fourth one is Pragmatic/Interactional Abilities/ Traits. Wen, Biedroń & Skehan (2017) states that the core of the hypothesis is the first two circle of the pattern and aptitude complexes circle symbolises the most original donation to aptitude theorising. Last two circles are interested in teaching aspects.

Aptitude complexes or trait complexes idea illustrates a particular perception of the function of cognitive, conative and affective features. These features influence the consequences of educational and instructional treatments in a broad framework that affects academic improvement during a whole life (Ackerman, 2003). Furthermore, researching aptitude constructs separately or in relation to cognitive and affective aspects helps researchers explain whether the aptitude is dynamic or has a connection with the learning situation (Winke, 2013).

2.1.4. Working Memory

Empirical studies analysing the function and the relationship of working memory and L2 aptitude constructs are in SLA's attention for many reasons (Winke,

2013). This interest stems from the need to find a place aptitude theory among other theories of learning and comprehend L2 aptitude complexes (Corno et al., 2001; Winke, 2013).

Working memory is a vital component of aptitude complexes in educational psychology (Kormos, 2013). It is regarded as one of the most critical factors that affect cognitive and linguistic success apart from its function in a wide area include fluid intelligence (Daneman & Carpenter, 1980), reasoning (Kyllonen & Christal, 1990; Süß, Oberauer, Wittmann, Wilhelm & Schulze, 2002), mathematical and spatial ability. As a consequence of its expanded impact area, working memory is searched by cognitive psychologists, developmental psychologists, clinicians, psychiatrists and educators studied in individual differences (Baddeley, Wen, Mota & McNeill, 2015)

Baddeley, Wen, Mota & McNeill (2015) defines the working memory as an intellectual structure in mind, a limited quantity of memory that keeps knowledge and capability for awareness regulation to employ this knowledge's usage. They also state that working memory capacity determines the situations that form the apprehension of a first and second language such as vocabulary, reading, listening and writing knowledge.

Kyllonen & Christal (1990) declared four leading causes of individual differences on cognitive function as processing speed, declarative knowledge, procedural knowledge and working memory capacity. According to Kyllonen & Christal (1990), this four-source model depends on cognitive theory and shows a possible connection between correlational and experimental disciplines of Cattel (1957). They regard working memory as the fundamental determinant in this model that affects the person's achievement on cognitive function. For that reason, working memory is seen as one of the essential elements of language aptitude by many researchers.

Kormos (2013) underlined the significance of knowing the structure and component of working memory to understand the relationship between aptitude and working memory. Kormos (2013) also mentions two different perspectives- Baddeley and Cowan (Cowan, 1999) - which reflect the connection of working memory and long term memory in the forming process of working memory concept

and states that both of them admit the significance of prior information and proficiency which are the reflections of long term memory in the intellectual effort performed by working memory.

Baddeley (2003) designed a multi-component model of working memory which comprises of four constituents: 1) Central Executive, 2) Visuospatial sketch-pad, 3) Episodic Buffer, and 4) Phonological Loop. These components are demonstrated in fluid systems while visual semantics, episodic long-term memory (LTM) and language are presented in crystallised systems. Visuospatial sketch-pad and visual semantic, episodic buffer and episodic LTM, phonological loop and language are all interrelated with each other in this model, and they are all related to Central Executive.

Baddeley (2003) explains the function of the phonological loop by giving examples of many studies related to neuroanatomical sides and language disorders. Results show that phonological loop's function related to short term memory (STM) and responsible for the acquisition of vocabulary and syntax of a language, and action control. Baddeley (2003) says that this view of "action control" supports the idea of Vygotsky (1962) that explains the language's function in the control of manners. Ellis & Sinclair (1996) states that short term description and practice support the final formulation of long-term knowledge both in terms of vocabulary and syntax, and STM competency is sufficient to forecast language acquisition. Reproduction of the words correctly and the competency to correlate the syntactic-semantic forms or the competency to reproduce the new phonological items in working memory indicates the acquisition of new vocabulary in foreign language learning, and therefore, it is possible to say that STM foresees English learning (Service,1992). LLAMA_D Sound Recognition Test was almost established on the task of Service,1992 (Meara, 2005).

The visual-spatial sketchpad is defined as responsible for coordinating spatial, visual and possibly kinaesthetic knowledge. This knowledge forms a cooperative description which is kept for a short time and exploited. Baddeley (2003) states that the phonological loop is more related to language disorders than visual-spatial sketchpad; however, research on the grammatical ability of people with William Syndrome shows its surprising function on comprehension.

The central executive system has a function behind the attention control of working memory (Baddely, 2003). Daneman & Carpenter (1980) considers administrative systems as the primary indicator of individual differences in working memory. Baddeley (1992) explains that the function of the central executive as integrating knowledge from two or more slave systems and says that a deficit in the central executive system plays a role in Alzheimer's disease.

The episodic buffer can be defined as restricted competency structure that bases on executive processing, but it is unlike from the executive system in being responsible for the depository of knowledge not the control of attention. This limited depository system is accepted to support the assumption of conscious awareness (Baddeley, 2003).

There are three periods in the conceptualisation process of aptitude: 1) testing 2) theory construction and 3) pedagogical execution and the stock point of these three different processes is that they regard working memory as essential to the ability for L2 language acquisition (Wen, Biedroń & Skehan, 2017). In other words, combining working memory into foreign language aptitude changes the perspective of studies from only "foreseeing and describing" (Carroll & Sapon, 1959) to "intervention" (Ranta, 2002; Robinson, 2007; Erlam, 2005). This perspective helps more precise comprehension of language aptitude and adapting language education to individual differences to improve learning (Vatz, Tare, Jackson & Doughty, 2013). As a result, foreign language aptitude is appreciated as changing, trainable and related with other individual determinants rather than being thought as having a fixed and separate character. That reflects the Snow (1992)'s perspective of "aptitude theory of tomorrow" (Wen, Biedroń & Skehan, 2017).

2.1.5. Research on Aptitude

Carroll & Sapon made considerable progress in the study of language aptitude tests with the Modern Language Aptitude Test (MLAT) in 1959 (Skehan,1998). Despite many criticisms, it is one of the tests that best understand and measure the nature of the aptitude. Therefore, studies in the field of aptitude can be examined as before and after MLAT.

2.1.5.1. Research Before MLAT

One of the studies conducted on the fact that aptitude is different from intelligence is Iowa Placement Examinations. Stoddard (1928) mentions the frequent use of intelligence tests as a success predictor or to choose and categorise college students. On the other hand, he explains the difference in Iowa Placement Examinations as providing knowledge about the possible achievement of the participants in particular subjects and determining the individual differences by taking complete-personality components into account. The test consists of two parts: aptitude tests and training tests. Aptitude tests are used to determine the intellectual skills associated with specific subject and training tests are used to determine the prior knowledge about the subject. Subjects in the test are Chemistry, English, French (as a foreign language) and mathematics. Foreign language aptitude was evaluated in four parts: the ability of students about the fixed aspects in English grammar, transferring ability of students from English to the foreign language (French), ability to understand and employ the grammar rules and the ability for translation. Stoddard (1928) states that the distinction between intellectual and instructional abilities contributes to the beneficial studies about the standards of learning and the character of intelligence.

On the other hand, Kaulfers (1929) sees the "language aptitude" is a vague term and states that it is not different from general intelligence. For this reason, he says that the idea of prognosis testing is based on an ambiguous foundation. He regards the English (L1 of the learners) is the finest and only way to forecast the possible success of foreign language process. Kaulfers (1930) mentions four approaches to forecast the language aptitude:1) Election of students by their L1 competence. 2) Selection of learners by their success in the preparatory classes in general language with the support of the teachers' and parents' ideas. 3) Election of learners regarding their mental competency assessed by intelligence tests and 4) election of learners via a standard aptitude test. He implies that despite the increasing interest in prognosis testing in language learning, aptitude tests are not valid. Kaulfers (1930) states that the interaction between language competency and general intelligence scores is evidence to show that there is no specific language aptitude.

Some researchers compare the correlations of achievement tests results, school grades and prognosis test results in order to prove the validity and reliability of these tests. Henmon (1929) states that because the assessment and forecast of achievement objectively are significant and preferable, many educators and psychologists work together to find out prognostic tests that will provide results for prediction and classification of learners like intelligence tests and school grades. He mentions some tests such as Alpha test, Beta tests, Iowa Placement Examinations and Columbia Research Bureau Tests and states that although these tests are not excellent, they are considerably better than the ideas and biased measurement. He also mentions the correlation results of intelligence tests and school grades with achievement and states that both of them did not supply enough acceptable data to use them for the forecast. That makes the prognosis tests vital for prediction. He exemplifies the tests of Symonds and Berry and Rice as the tests that have the highest correlation. However, he points out that although these results are high, they are not adequate to use for prediction and classification, because school grade correlations are higher than the result of prognostic tests.

Similarly, Matheus (1937) compares the results of The George Washington University Series Language Aptitude Test developed by Hunt, Thorndike Intelligence Examination and school grades. Correlation between an aptitude test and grades and between intelligence test and grades are the same (0.4). The correlation between an aptitude test and an intelligence test is higher than these results (0.6).

Because of the unfortunate failure in foreign language classrooms, the requirement of prognostic testing seemed inevitable by the researchers and they adapted these tests to their learners –e.g. Symonds Foreign Language Prognosis Test (Freeman and Symonds, 1928) and German Prognosis Test (Virgil, 1936). Virgil (1936) compares both tests with Columbia Research Bureau German Test and Iowa Placement Test. She states that results are adequate to make a functional prediction for the success of groups but not for individuals.

Richardson (1933) is one of the other researchers using Symonds Foreign Language Prognosis Test and compares the learners who do not have prior language education and who have at least one year of language education. Results show that language aptitude test is more successful in prediction when the learners have prior

language education. Richardson also states that the election of learners regarding only the mental test results is not recommended, for the reason that it cannot assess the particular skills and aptitude.

All of the prognostic tests above are based on the assessment of reading and grammatical skills. However, Bottke & Milligan (1945) studied the development of an aural and oral aptitude test for foreign language learning. Italian is used as the target language in this test, but they warn about that if there are students familiar with Italian, this makes the exam null and that requires the preparation of the same tests. The test consists of eight parts: 1) Inference understanding, 2) Sound differentiation, 3) Assimilation and understanding of vocabulary in sentences, 4) Vowel timbre, 5) Word fluency, 6) General hearing, 7) Ability to mimic, 8) Transfer of rules of pronunciation to unknown material. Bottke & Milligan (1945) states that the test was used experimentally; nevertheless, the number of participants is not adequate to conclude.

The prediction and classification in foreign language learning is not only the necessity in universities and schools but also a necessity in the army. Aggeler (1950) mentions The Army Language School founded with the aim of language teaching and military intelligence. The learners should have gained abilities like translating, understanding, examining and speaking. Beginning with Japanese for Pearl Harbour, the school trained the learners in twenty-one languages such as Russian, Chinese, Spanish, Portuguese, French, Korean, Roumanian, Polish, Bulgarian, Czech, Hungarian, Arabic, Persian and Turkish. The learners of this school had a higher level of intelligence than the other moderate level staff, and their age differed from 17 to 50. For that reason, the prediction of their aptitude in foreign language learning was a necessary criterion while accepting the learners. So, the learners took a language aptitude test at the beginning of the school. That test had mainly two parts: 1) the aptitude test which was used in universities and 2) an intonation test which assessed the aural ability of learners about the pronunciation of Chinese words prepared by the Army Language School. However, correlation scores of the tests applied while selecting the learners was not high enough, tests were not tricky, and intonation test was not more than a hearing test. Aggeler (1950) explains the procedure, feature of lecturers (native speaker or native-like) and methods (Grammar Translation Method, Direct Method and a repetition process called later as

Audiolingual Method). He also mentions the hours (from 510h to 1380h) and materials (records of broadcasts by a radio station in Chinese, Russian or any target language, dictated newscasts and movie soundtracks) in detail and underlines the importance of having a qualified staff to communicate in many languages at the time of war. In an interview, Carroll mentions the significance of those people who listened to the radio broadcasts for long hours in order to get knowledge about the other countries for military planning in the Pacific war. He also adds that selection of the quick learners is still essential for military, government, Foreign Service Institute (FSI), Peace Corps and Central Intelligence Agency (CIA) (Stansfield & Reed, 2004). Therefore, there was a need a reliable foreign language aptitude test which would save time and lessen the rate of the failure. That need was the reason of development Modern Language Aptitude Test (MLAT) which can be called a milestone in testing foreign language learning aptitude.

2.1.5.2. Modern Language Aptitude Test (MLAT)

MLAT has been used for election, prediction and classification for more than fifty years and Carroll's studies are still respected as the most inclusive and accurate ones in language aptitude testing (Stansfield & Reed, 2004).

MLAT was developed by John B. Carroll and Stanley Sapon in 1959 and was very popular in the 60s and 70s when the audiolingual method was commonly used in foreign language learning. The test dwindled in the 80s with the acceptance of communicative methods as more suitable to the foreign language learning; when Higgs and Krashen (1983) said that aptitude is only related to grammatical sensitivity and valid in instructional settings, not in natural communicative settings. On the contrary, Ehrman (1994) stated that MLAT had the same correlations both in audiolingual and communicative settings; however, very natural settings may have affected the result. She compared the MLAT subtests with the tools used for assessment of individual differences on the learners of FSI which used a communicative curriculum and results were almost the same with the other classroom settings.

Parry& Stansfield (1990) mentions the reconsidered view of language aptitude in the introduction part of the book compiled from the articles presented in a language aptitude conference. In 1987, Interagency Language Roundtable (ILR), an

association consisted of the counsellors from governmental institutions - FSI, CIA, FBI, Defence Language Institute (DLI) and the National Security Agency (NSA) – concerning with foreign language learning, agreed to promote a distinctive conference on language aptitude and assessment. Because the earlier tests did not consider the cognitive studies and individual differences, the demand for modernised tests and studies on language aptitude was the subject of that conference. The conference started with the Carroll (1990)'s appraisal of language aptitude in terms of cognitive abilities from past to present, and his advice and critics were correct about the testing of aptitude although he never modified MLAT (Parry& Stansfield, 1990).

MLAT has five subtests: Part 1_ Number Learning Test, Part 2_ Phonetic Script Test, Part 3_ Spelling Clues Test, Part 4_ Words in Sentences and Part 5_ Paired Associates (Carroll & Sapon, 1959). Carroll (1990) states the existence of some insignificant mistakes in MLAT - in Number Learning, Phonetic Script and Spelling Clues parts- and says that it is possible either revise or compensate them in the new form of the aptitude tests.

Carroll (1964) identifies the character of aptitude under four titles: Phonetic Coding Ability, Grammatical Sensitivity, Memory Abilities and Inductive Language Learning Ability.

- Phonetic Coding Ability: It is described as one of the most vital skills necessary for learning the language. This skill can mainly be assessed by Phonetic Script Test. Paired-Associates Test, the Artificial Language Number Test, Spelling Clues Test are the other subtests of MLAT which can assess this skill. This ability enables the perception, acknowledgement and recalling of the auditory phonetic materials in a short time. If a person has the poor coding skill, it means that he will have problems both in recalling the phonetic words, structures and so on and in imitating the speech sounds (Carroll, 1964).

  Carroll (1990) mentions his additional ideas and advice about phonetic coding ability. He states that this ability has a genuine connection with language disorders such as dyslexia. He explains the connection by giving dyslexic people as an example who have problems

in Phonetic Script Test in MLAT or Sound-Symbol Association test in PLAB. These people also have problems in foreign language learning, and that explains the importance of these tests in the prediction of language learning achievement. Carroll also mentions about Telzrow (1985)'s categorisation of dyslexic people into three types as auditory phonetic, visuospatial and mixed. He supposes that Telzrow's auditory phonetic group constitutes the people having low phonetic coding skills.

- Grammatical Sensitivity: Another vital component of language aptitude is grammatical sensitivity. This skill is related to people's managing capacity for grammar. Words in Sentences subtest of MLAT can assess it (Carroll, 1964). People who have high scores without any formal training in grammar are notably successful people in foreign language learning (Carroll, 1990).

- Memory abilities: Carroll (1964) describes the rote memorisation ability as a distinct ability from phonetic coding although people need a particular amount of coding ability to have rote learning skill. It is assessed by the Paired Associates Test and Number Learning subtests. Carroll (1990) warns about the difference between memory ability and rote memorisation ability and says that Paired Associate Test does not assess the general memory skills. He also states that he was never sure about the effectiveness of the Paired Associates Test as he was in Phonetic Script and Words in Sentences because of the uncontrollably changing scores of different participants. At this point, Carroll (1990) regards the study of Wesche (1981) vital and cited that memory skill is not significant in Analytical instruction setting; however, it seems significant in Functional instruction setting. Carroll (1990) says that studies about memory operation constitutes an essential part of cognitive psychology and mentions the researches about episodic memory. Furthermore, he states that paired-associate memory can be seen only as one part of this episodic memory.

  Gajar (1987) asserted that all subtests of MLAT foresees the foreign language learning achievement and particularly MLAT_4 and 5 (Words in Sentences and Paired Associates Tests) are very decisive in identification

of learning disabilities (LD) caused by the misuse of mnemonic strategies and the scarcity of memory capacity to remember the vital knowledge (Scruggs & Mastropieri,1990). Sparks, Ganschow & Pohlman (1989) support the results of Gajar (1987) in their study using MLAT and says that outcomes indicate that the learning disability may cause the failure in foreign language learning.

- Inductive Language Learning Ability: This skill is related to the deduction of rules and structures in an unfamiliar linguistic subject. Carroll (1990) states that MLAT has no part in assessing this ability adequately. However, Number Learning Test may assess it to some extent. However, he says that PLAB-4 Linguistic Analysis and DLAB can assess this ability adequately.

Carroll (1959) questions the achievement of MLAT in secondary or high schools where the motivation of learners is remarkably changeable, and the course duration is limited to three or four hours in a week. He compares the absolute success of MLAT in the prediction of foreign language learning in the one-week Chinese courses or long and exhaustive Spanish, Arabic or any other language courses of U.S. Air Force or government agencies where the motivation is remarkably high. The results show that there is not a remarkable difference between the young and adult groups. However, Carroll (1959) says that guidance is significant in foreign language aptitude testing and accomplishment of the learners in the test can be increased by this guidance. However, high school or secondary school setting is not as successful as the government or army in guidance. For that reason, participants should have taken some foreign language education before the test.

MLAT has some different versions:

- EMLAT: MLAT is used to assess the aptitude of adult learners. EMLAT (elementary form) was developed for young learners (8-11 years),
- MLAT for blind learners,
- MLAT for learners whose L1 is Italian, French, Japanese and Spanish (Spanish one is an elementary form),
- Computer-based MLAT,

- Short form of MLAT for a limited time (Skehan, 1991; Language Aptitude Tests, 2019).

To sum up, MLAT can be used in intensive courses, placement of secondary and high school learners and identification of learning problems; yet, Carroll (1959) states that it is not possible to say that MLAT foresees the achievement of learners who have adequate time and chance, it is for predicting the rapid and successful learners in a classical language course. He also notes that aptitude does not change from one language to another and it is valid in all languages.

2.1.5.3. Research After MLAT

Many tests were developed after MLAT both to eliminate the missing parts of MLAT and to answer problems related to aptitude. Although these tests were designed based on MLAT, they were not successful in predicting as MLAT was (Li, 2014). These tests include Pimsleur Language Aptitude Battery (PLAB), VORD, Defence Language Aptitude Battery (DLAB), LLAMA and CANAL-F and HiLAB.

- Pimsleur Language Aptitude Battery (PLAB):

  PLAB was designed by Paul Pimsleur for the students of junior or junior high schools (7 and 12 grades) to identify the learners' aptitude for learning and to hear a foreign language. This test is also used to identify learning disabilities and under-achievers in language learning (Language Aptitude Tests, 2019). Pimsleur (1964) defined the unsuccessful learner in language learning as someone who has lower grades in modern foreign languages than the average grades that he gets in other subjects. That means if a learner demonstrates an ordinary aptitude for other school subjects while he/she shows low one for language learning (assessed by an aptitude battery), this learner has a deficiency or disability in language aptitude. This cognitive restriction is characterised by low points such as 20 per cent, 10 per cent or 5. This assessment of aptitude enables the placement, selection and guidance of the language learners. PLAB contains six sections: 1) predicted former grade average for all dominant subjects, 2) motivation, 3) English vocabulary, 4) language analysis (3-4 assess the verbal ability), 5) sound discrimination and 6) sound-symbol

association (5-6 assess the auditory ability) (Language Aptitude Tests, 2019).

Carroll (1990) cites problems of auditory ability in two ways. In the first, he mentions that the problem may be related to the hearing problem and mentions the work of Wesche (1981) using MLAT, PLAB and white noise hearing test- which utilise a buzzy atmosphere during application- to identify aptitude profiles and the high accomplishment of these profiles to foresee the learning achievement. Carroll (1990) asserts that in this study, PLAB's Sound Discrimination and Sound-Symbol Association Tests and MLAT's Number Learning and Phonetic Script Tests with white noise hearing test show the potential hearing loss and this may be a determinant in auditory ability. Carrol (1990), on the other hand, mentions studies which assessed the differences in perception in a buzzy environment which can be caused by individual differences in auditory ability, rather than a hearing loss. Carroll (1990) gives the example of Stankov & Horn (1980)'s study which determined a few aspects in auditory aptitude. These are the Speech Perception Under Distraction (SPUD) - which was assessed by Talk Masking and Cafeteria Noise Masking, Temporal Tracking (Tc), Maintaining and Judging Rhythm (MAJR), and Discrimination Among Sound Patterns (DASP) and he advices the development of aptitude tests by taking this perspective into account.

- <u>VORD:</u>

Department of Defence (DOD) and Central Intelligence Agency (CIA) developed an aptitude test which has an artificial language called VORD represented "word" in this language in 1973. Parry & Child (1990) states that its improvement based on the studies DOD made for Army Language Aptitude Test (ALAT) in the 1950s. This test was improved to foresee the learning success of Western Indo-European Languages, and it consisted of 57 items which could be completed in 27 minutes. This short duration was a benefit of the test; however, it was not very successful in anticipating the achievement results of other languages.

With the help of the background knowledge gained by ALAT, Child formed the VORD in 1970 - which used an artificial language identical to

Turkish grammatical structure and asked the participants to use that structure. That was different from MLAT's grammar assessment. VORD consists of 32 items and four sections: 1) Noun Morphology, 2) Verb Morphology, 3) Phrase and Sentence Level Syntax, and 4) Text Completion.

In 1987, CIA and DOD directed a study to see the correlation between MLAT and VORD and the correlations of these tests with age, time, motivation, gender, and satisfaction of the learners. Results showed that subtests of VORD seem to correlate MLAT_ 4, Words in Sentences, although their different approach to grammar learning aptitude. Other subtests did not have any correlation to MLAT. Furthermore, there was not any meaningful relationship between MLAT-VORD and other factors – age, motivation, gender, satisfaction and time. Parry & Child (1990) concludes that MLAT seems the most excellent tool to foresee language learning achievement.

- Defence Language Aptitude Battery (DLAB):

  Petersen & Al-Haik (1976) aimed to produce an aptitude test appropriate to the curriculum of Defence Language Institute (DLI) which gave the education of over 50 foreign languages. DLI education was based on intensive Audiolingual Method which was called as Army Method at that time. In this study, they compared MLAT, PLAB, Defence Language Aptitude Test (DLAT) – which had been designed twenty years ago-, Taylor Manifest Anxiety Scale, The Need for Social Approval Scale and the Otis-Lenon IQ Test to ascertain the truth and authenticity of DLAB in the prediction of language aptitude.

  Petersen & Al-Haik (1976) says that DLAB was formed in three sections as the combination of Horne's Assessment of Basic Linguistic Abilities (HABLA) (Horne, 1971) and the Al-Haik Foreign Language Auditory Aptitude Teste (AFLAAT) (Al-Haik, 1972). HABLA asks the participants to shape the linguistic ideas by matching the pictures with an artificial language text. AFLAAT contains three sections: 1) Foreign Language Sounds_ a) Utterance Identification, b) Recognition of Vowel Patterns, c) Recognition of Stress Patterns. 2) Foreign Language Writing

and Sound-Symbol Association. 3) Foreign Language Grammar_ a) noun and adjective agreement, b) passive form, c) sentence structure, d) combination of the rules presented in a-b and c. DLAB has a significant validity in predicting achievement by differentiating the diversities in difficult languages (Lett & O'Mara, 1990); but it does not correlate all aptitude factors of Carroll (1959) (Petersen & Al-Haik, 1976).

- Cognitive Ability for Novelty in Acquisition of Language (Foreign) Theory (CANAL-FT):

CANAL-FT is one of the new aptitude tests which has an unlike approach from standard aptitude tests. Grigornko, Sternberg & Ehrman (2000) mentions the three unique characteristics of this theory that makes it distinctive: 1) CANAL-FT is based on cognitive theory. 2) Aptitude is regarded as a changeable unity rather than being fixed. 3) Testing process grounds on a simulation which asks learners to infer and acquire the rules of an artificial language called Ursulu. CANAL-FT assumes that the capability of managing with uncertainty and newness is the necessary aptitude to learn a foreign language. The theory contains five acquisition processes: selective encoding, accidental encoding, selective comparison, selective transfer and selective combination. These processes function at four stages: lexical, morphological, semantic and syntactic. All these five processes which function at four stages are in two forms: visual (reading-writing) and oral (listening-speaking). A foreign language learner regularly faces with new linguistic elements, so his/her attention control is indicative in the language learning process. Because what one store in his/her working memory determines what can be transferred to long term memory. These encoding, depository and recovery process are measured with two kinds of test: immediate recall and delayed recall. In brief, CANAL-FT measures all these causes of individual differences.

CANAL-FT consists of nine parts:

1-2) Learning Meanings of Neologisms from Context (24 short paragraphs in oral and written form, multiple choice questions with five

options to find the best one which resembles the meaning of neologism. It has two forms: immediate recall and delayed recall).

3-4) Understanding the Meaning of the Passages (It has four assessment parts: comprehension of summary, main idea, details, inference and application and two forms: immediate and delayed).

5-6) Continues Paired-Associate Learning (60-word pairs which were used as a hint by the learners to promote the learning process, immediate and delayed forms).

7-8) Sentential Inference (multiple choice questions to find the best translation of Ursulu and English sentences, immediate and delayed forms).

9) Learning Language Rules (12 elements to measure the ability of learners in the inference the rules of Ursulu language, only immediate form).

In order to analyse the operation of CANAL-FT in aptitude testing, Grigornko, Sternberg & Ehrman (2000) compare it with other tests. These tests are:

- Test of g: Culture Fair Test (CFT) by Cattell (1940; 1973). It involves four subtests 1) Series, 2) Classification, 3) Matrices, 4) Conditions (Topology).
- The Concept Mastery Test (CMT) by Terman (1970). It assumes that people with high levels of IQ can keep concepts and ideas in mind at a more prosperous rate than those who do not and has two subtests: 1) Synonyms and Antonyms, and 2) Analogies.
- Modern Language Aptitude Test (MLAT)
- Prior Language Experience Questionnaire.

Grigornko, Sternberg & Ehrman (2000) concludes that the test accommodates all of the particular qualifications that the federal intended for intensive language programs by predicting language learning achievement, determining learner profiles and providing the most excellent placement. CANAL-FT focuses on the two aspects of the language learning process: intelligence connected and language-specific

aspects. Grigornko, Sternberg & Ehrman (2000) says that all subtests of CANAL-FT are successful in the evaluation of language-specific aspects while that is only seen in two subtests of MLAT- Paired Associates and Spelling Clues.

- LLAMA Language Aptitude Test:

LLAMA developed by Meara (2005) is a language-neutral test which can be used by all learners regardless of their L1. Meara (2005) explains the developmental process of LLAMA and mentions the first version of it MM&L-D developed by Meara, Milton & Lorenzo-Dus (2001). This test contains five subtests called Lat_A, Lat_B, Lat_C, Lat_D and Lat_E. These tests are generally grounded on MLAT, but they have been improved in line with changing approaches in language learning over time. The universal use of MM&L-D required the test to be modified to other languages, which led to the opinion of developing a test for non-native English speakers. LLAMA uses an artificial language and has four subtests:

- LLAMA B: A Vocabulary Learning Test:

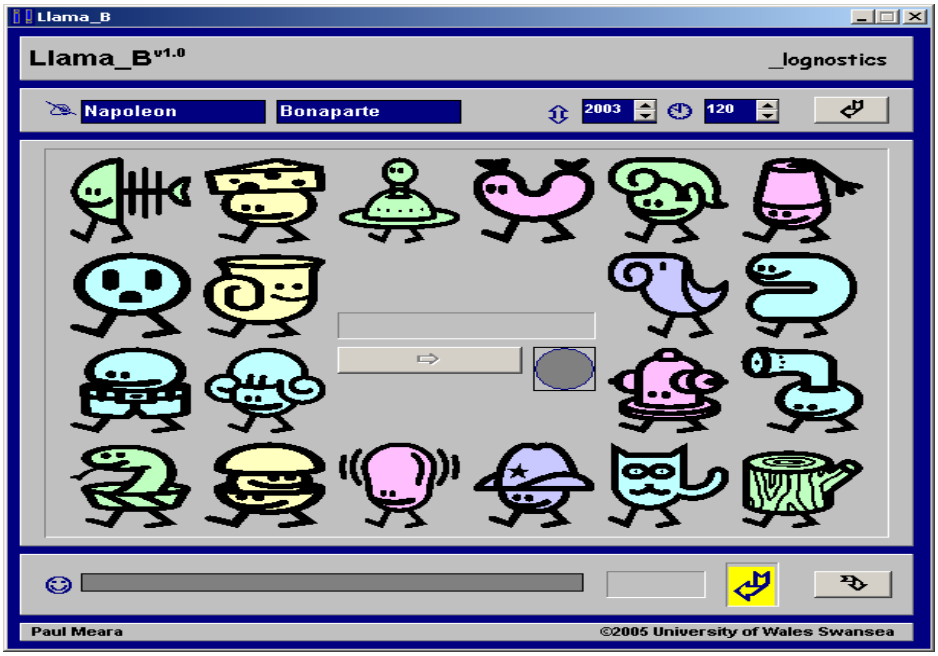

Figure 1.LLAMA B: A Vocabulary Learning Test

This test measures the capacity to memorise as many words as possible in the shortest possible time. It grounded on the earliest vocabulary test of Carroll & Sapon (1959). The words are authentic words obtained from a Central American language and are randomly matched with figures.

Participants have two minutes to memorise the names of the 20 items, and then they can match the names and figures at their speed. At the end of the test, they can get their score near the yellow arrow mark. 0-20 means very low aptitude in vocabulary learning, 25-45 is average, 50-70 means competent and 75-100 means notably competent.

- LLAMA D: A Sound Recognition Test:

To be able to recognise the repetitive structures in the language of speech is one of the necessary skills of language learning. This ability supports the vocabulary learning and identifying small differences in the ending which indicate grammatical aspects. LLAMA D was developed to assess the short-term memory capacity of the participants. MLAT did not include this test. It based on the studies of Service (1992) and Speciale, Ellis & Bywater (2004).

In order to make the sound challenging to recognise and reduce the similarity of sounds to any language, the names of flower and natural objects were selected from a British Colombian language and the pronunciation combined with French by using AT&T Natural Voices. In the test, participants hear a series of sound only once. After listening part, when they click the arrow in the middle of the screen, they will hear a sound, and they will decide if they heard it before or not. If they think that they heard the sound shortly before during listening, they will click the smiling face, or think that they did not hear, they will click the pale face. At the end of the test, the score will be seen near the yellow mark. The first version of LLAMA D, LAT_D, had two versions utilised a series of Polish and Turkish words. Participants should not be

Figure 2. LLAMA D: A Sound Recognition Test

familiar with the language used in aptitude testing. For some countries Polish and Turkish are very familiar languages, LAT_D cannot be used by the people of these countries. Therefore, LLAMA D uses an artificial language to prevent this issue. 0-10 means very low aptitude in sound recognition, 15-35 is average, 40-60 means competent and 75-100 means notably competent.

- LLAMA E: Sound-Symbol Correspondence Test:

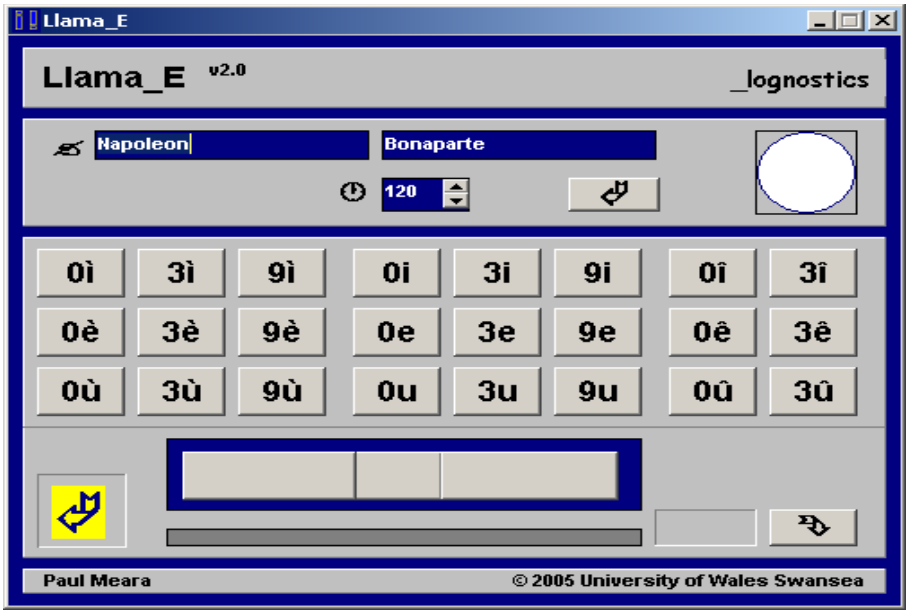

Figure 3. LLAMA E: Sound-Symbol Correspondence Test

The test is used to recognise the learners who are easily daunted by the unknown spelling systems or are experts in the field of phonetics. In the test, there are 22 syllables to practice in two minutes. Participants should memorise the spoken form of them. At the end of the practice time, when they click the arrow in the middle of the screen, they are asked to choose the correct written form of the spoken word. The score will appear in the lower right corner of the screen. 0-15 means very low aptitude in sound-symbol correspondence, 20-45 is average, 50-65 means competent and 75-100 means notably competent.

- LLAMA F: Grammatical Inferencing Test:

The function of the test is to assess participants' ability to derive rules of an artificial language. This time, participants have five minutes to practice the rules of the language. When the participant clicks one of the 20 small boxes, a picture will appear on the screen and a sentence near the picture. This sentence describes the

picture and the participant should infer the grammatical patterns in the sentence. At the end of the practice time, the participant should click the arrow to see the picture and two sentences. The participant should decide which one is the correct sentence described the picture best. The score will appear in the lower right corner of the screen. 0-15 means very low aptitude in sound-symbol correspondence, 20-45 is average, 50-65 means competent and 75-100 means notably competent.

Figure 4. LLAMA F: Grammatical Inferencing Test:

Rogers, Meara, Barnett-Legh, Curry & Davie (2017) examines the LLAMA test to measure the reliability of the test and to answer some emerging questions about its language neutral character, age, bilingual learners and individual differences. Firstly, they conclude that LLAMA is language neutral because there is no difference among the score of the participants whose L1 are Arabian, Chinese and English. This outcome supports the data of Granena (2013) based on the study which compares the participants whose L1 are Chinese, Spanish and English.

Secondly, they identify no distinction between the monolingual and bilingual group; but there are vital differences between trained and untrained groups because of the strategy use. The trained group has better scores resulting from their strategy development. Thirdly, they diagnose that LLAMA is not appropriate for young learners. As a result, they say that individual

differences such as gender and L1 do not affect the results of the LLAMA aptitude test.

Granena (2013) mentions the advantages of the LLAMA test which is free, computer-based, easy to implement and easily accessible by researchers, compared to other tests that are either paid, made on paper or are hard to reach because of the army origin. Granena (2013) compares the subtests of LLAMA with general ability measure for adults (GAMA), probabilistic serial reaction time (SRT) test, operation span test (OSPAN), letter span test, digit-symbol correspondence test and an attention control test (Simon Task). The controls performed over two years show that LLAMA test is reliable and aptitude has a fixed character as Carroll said.

Granena (2013) also mentions the relationship among the subtests of LLAMA and states that while LLAMA B-E and F tests are interrelated, D test has no relation to these tests. A participant who gets high scores from B-E and F tests can get low scores from D test or vice-versa, and that indicates the existence of different aptitude profiles. The difference between the D test and the other group is the practice time given to the participants to study the artificial language. This practice time allows the participant to develop a strategy and use problem-solving methods. These three tests require the use of cognitive abilities, explicit inductive language learning ability or grammatical sensitivity called as an analytical ability by Skehan (1998). On the other hand, D test has no practice time, and this does not allow the participant to use his/her analytical skills, so the use of strategy cannot affect the results. That indicates the assessment of explicit cognitive process by B-E and F tests and the implicit cognitive process by D test. That means that LLAMA test can assess the two aspects of aptitude: explicit language aptitude (ELA) requiring analytical skills and implicit language aptitude (ILA) requiring series learning competency (Granena, 2013).

- Hi-Level Language Aptitude Battery (Hi-LAB):

Hi-LAB was designed to identify the learners who have an aptitude to reach a high level of competence. Previous aptitude tests such as MLAT, PLAB and DLAB were designed to assess the initial aptitude of the learners. Therefore, it

was an unanswered question if it is possible to assess an aptitude which enables the learners to achieve a native-like competence. Doughty (2013) mentioned the determinants which are different for the initial aptitude and advanced level aptitude. She defined the high-level attainment and stated that the criteria for achieving high success could be determined according to the Interagency Language Roundtable (ILR) and Common European Framework (CEF) scales. In that study, the Defence Language Proficiency Test based on the ILR scale was used. In order to design Hi-LAB, high-level language aptitude components and their assessment scales were determined. These components are working memory, updating, inhibitory control, task switching, phonological short term memory, associative memory, long term memory-retrieval, auditory perceptual acuity, processing speed and implicit induction. Each component was assessed through another test and some components with two different tests. Eleven tests assess the cognitive and perceptual abilities with a Language History Questionnaire. These tests are Running Memory Span, Antisaccade Test, Stroop Test, Task Switching Numbers Test, Letter Span Test, Non-Word Span, Paired Associates Test, Available Long-Term Memory Synonym Test, Phonemic Discrimination, Phonemic Categorization, and Serial Reaction Time Test.

According to results, Hi-LAB is highly successful in identifying the learners who have high-level aptitude from normal ones and can be used to determine aptitude profiles for the learners. Paired associates, Serial Reaction Time and Letter Span Tests supply considerable knowledge which supports the notion that associative memory, implicit learning, phonological short term memory are the determinants of the learners who manage the ultimate L2 achievement (Linck, Hughes, Campbell, Silbert, Tare, Jackson & Doughty, 2013).

2.2. Language Learning Strategies

2.2.1. Definition and Significance

Each student has individual differences that cause the learning process to differ from individual to individual. These differences lead each student to create his or her learning ways. These learning patterns are generally referred to as learning strategies. The paths that successful students follow in language learning were the subject of the first studies in this area, and researchers have tried to define learning strategies or the strategy types of successful students.

Strategies and the character of successful learners are firstly defined by Rubin (1975). He describes the strategies as methods and instruments which may be used by a learner to get the knowledge and defined successful learners as eager and precise guessers. All of the characteristics of the successful learners mentioned in the article resemble the facilities of cognitive and metacognitive strategy groups of Oxford (1990). Rubin (1975) says that on the way to success, aptitude, motivation and opportunity are three crucial components, and the talent factor cannot provide meaningful data without analysing in detail the motivation and opportunities that affect the student and the strategies used by them. Rubin (1975) regards aptitude as a trainable factor.

Naiman (1978) states five strategies which are necessary for successful language acquisition: a) Active task approach, b) Realization of language as a system and c) as a means of communication, d) Management of effective demand and e) Monitoring of L2 performance. These five categories also have subtitles.

Weinstein & Mayer (1983) define learning strategies as attitudes and opinions which make the learners interested in learning and affect the learners' enciphering process. So, any specific strategy aims to influence the manner of the learner in their choice, perception, arranging and combining. They mention five significant types of strategies: a) Rehearsal strategies, b) Elaboration strategies, c) Organizational strategies, d) Comprehension-Monitoring strategies, and e) Affective strategies.

Oxford & Nyikos (1989) define the strategies as efforts which assist learners in acquiring, maintaining and improving their knowledge. The use of strategy by the learner changes according to various factors such as age, gender, personality, expertise, motivation, cultural background, language learning purpose and language characteristics (Oxford & Nyikos, 1989; Oxford, 1994; Oxford, 2002). Oxford & Nyikos (1989) state that the use of strategy is very useful in getting the student's learning responsibility. For this reason, Oxford (1994; 2002) and Rubin (2001) explain the features of successful learners' using strategy to determine the path leading to success. As stated in these studies, successful learners are aware of their use of strategy and operate cognitive strategies along with metacognitive ones. Strategies are used consciously. If the learners are not conscious about their strategy use and they start to use them as a habit, this doesn't fit the definition of strategy, and they lose their importance. (Ellis, 1994; Bachman and Cohen, 1998; Phakiti, 2003). Furthermore, Phakiti (2003) mentions the use of metacognitive strategies has a relationship with the use of effective strategies; therefore using effective ones also improves the achievement. In addition, successful learners use strategies in a harmonious way instead of using them separately (Oxford, 1994; 2002; Rubin, 2001).

O'malley & Chamot (1990) describes the strategies as specific ideas and acts which help learners to understand and memorize new knowledge. They also describe in detail the grouping of strategies that researchers in this field have done. O'Malley, Chamot, Stewner-Manzanares, Russo and Küpper (1985) made a similar grouping of Oxford (1990). Oxford (1990) divides the strategies into two main categories as a) Direct and b) Indirect. Direct Strategies are 1) Memory strategies, 2) Cognitive strategies, and 3) Compensation strategies. Indirect Strategies are 1) Metacognitive, 2) Affective and 3) Social ones. This grouping of Oxford (1990) and the SILL test (Strategy Inventory for Language Learning) is based on the Oxford (1986)'s taxonomy study.

2.2.2. Strategy Training

A satisfactory instruction teaches students how to learn, how to recall, how to judge and how to motivate themselves (Weinstein & Mayer, 1983). Therefore, strategy training seems fascinating and also as a key to satisfactory instruction.

Achievement in language learning can be improved through strategy training (Carrell, Pharis & Liberto, 1989). Oxford (2002) states many studies on strategy training have yielded positive results, but some of them have still problems due to various limitations.

Weinstein, Husman & Dierking (2000) assert that the primary goal of strategy training is to assist learners in becoming "good strategy users" and "good thinkers". Moreover, students who have a lower degree of achievement can be assisted with strategy training in order to make them more successful learners (Chamot, 2005). The characteristics of proper strategy training can be listed as follows:

- ✓ Strategy training is possible for both ESL and EFL. Learning how to learn applies to both (Macaro, 2002; Oxford, 2011).
- ✓ In a productive training process, these four components are essential: a) what to teach, b) how to teach, c) where to teach, and d) when to teach (Mayer, 1996).
- ✓ Training should inspire learners about the functions of learning strategies (Pressley, 1995).
- ✓ It must offer several opportunities to practice at the same time. This may slow the learning process but make it more permanent (Pressley, 1995).
- ✓ The first language can be used while training especially with the beginner learners (Chamot, 2005; Macaro, 2002).
- ✓ Strategy training shouldn't be too short (Chamot, 2005; Oxford, 2002; 1994).
- ✓ Learning and teaching materials must match the level of the students (Oxford, 2002).
- ✓ It should contain metacognitive and cognitive strategies as well as social and effective ones (Oxford, 2002).
- ✓ The training process should be embedded in regular classroom instruction and strategies should be presented explicitly (Chamot, 2005; Oxford, 2002; 1994).
- ✓ Learning strategies should be presented coherently in a system which sees learners as a whole person with their cognitive, metacognitive, social-affective and many other sides (Oxford, 2002; 1994; 2011).

- ✓ Different tasks may require different kinds of strategies. So, this should be taken into account while preparing the training process (Oxford, 1994; 2002; 2011; Bachman and Cohen, 1998).
- ✓ The training process should include the use of a strategy on a large scale and cannot be limited to a few techniques (Oxford, 2002).
- ✓ Learning strategies can be integrated into task-based instructions. (Chamot, 2005)
- ✓ Portfolios can be used in the strategy training process and have many benefits for both teacher and learners (Yang, 2003).
- ✓ Strategy training should be designed to continue beyond the classroom (Oxford, 1994).
- ✓ The training process should supply learners with enough exercise in different L2 tasks through authentic materials (Pressley, 1995; Oxford, 1994).

2.2.3. Strategy Assessment Types

Chamot (2005) says that self-report is the only methods to detect the unobservable mental strategy use of learners, although it has many sides open to discussion.

Cohen (1996; 2006) categorized verbal report types as a) self-report (questionnaires), b) self-observation (journals, diaries) and c) self-revelation (think-aloud). These three ways were compared in the study of Cohen (1996), and it was suggested that verbal reports are significant to comprehend language-learning and use strategies.

Oxford (1996) groups the strategy evaluation types in seven: a) Strategy questionnaires, b) Observations, c) Interviews, d) Dialogue journals and diaries, e) Recollective narratives, f) Think-aloud protocols, g) Strategy checklists. Oxford (1996) mentions the advantages and disadvantages of all these evaluation types in detail, and there was an elaborative clarification of where these strategies could be used.

Oxford (1996) and Chamot (2004) states questionnaires are one of the most conventional techniques to determine the strategy use of the learners. On the other

hand, for many reasons, such as the participant does not reflect the truth, the questionnaires cannot solve the complex structure of strategies and cannot measure the use of strategy in depth (Oxford & Amerstorfer (Eds.), 2018).

Strategy Inventory for Language Learning (SILL) was developed by Oxford (1986). This questionnaire was introduced in Oxford (1990)'s appendix part as two types: a) 80 items version is for language learners whose native language is English and b) 50 items version is for ESL and EFL learners. Oxford (1996) says that SILL can measure a wide variety of strategies in a way that will allow us to see the student as a whole. SILL also has a utility which can give ideas about language learners' achievement. Thanks to SILL, teachers can follow a program that will determine the ways in which their students can succeed and improve their achievements.

3. METHODOLOGY

3.1.Research Design

This study set out to reveal the relationship between aptitude, achievement and self-reported strategy use of the learners. It also aimed to determine the aptitude profiles of the participants and the strategy use of these profiles. In order to do so, both qualitative and quantitative methods were employed to achieve the triangulation of the data.

At the onset of the study, the Oxford Placement Test was administered to the participants along with the Strategy Inventory for Language Learning (Oxford, 1990). Following this step, LLAMA aptitude tests were administered to each student individually. As it was put forward by Carroll (1959) and Grenena (2013), aptitude has a fixed character and intervention wouldn't not have any effect on it over a two-year period of time, it was assessed only once at the beginning of the study.

To find out the effect of language aptitude on achievement, a ten-week intervention program was planned and applied. At the end of the intervention program, OPT was administered again as the post-test of the study. Since OPT is a proficiency test, the results cannot be used as achievement. In order to find out the achievement, OPT was administered as pre and post-test and an intervention designed according to aptitude complexes and strategy use was integrated into the study. Mean difference between the pre and post test results shows the achievement of the participants that they had in ten-week training period.

The study started with 235 participants but after the data gathering process, the missing values excluded and the data of 152 participants were used. In the data analysis process, SPSS (Version 21) software was used to analyse the data. First,

whether there is a significant relationship between pre and post-test scores was found with paired samples t-test. Then, the participants were grouped according to their aptitude levels, and paired samples t-test was used to find out if there is a significant difference between pre and post-test results of the groups. Also, the Pearson Correlation analysis was made to find out if there is a relationship between achievement and aptitude scores. Next, the participants were grouped according to their OPT scores (A1, A2, B1) and reported strategy use of each group was identified. Reported strategy use of aptitude level groups was also identified. Finally, the outliers (those who have high aptitude scores but low achievement scores and low aptitude scores and high achievement scores) were identified and semi-structured interviews were done with the outliers to reveal the underlying factors that are not related to aptitude level and strategy use on the achievement of this exception learners.

3.2.Participants

Participants of the study are the randomly-selected freshmen students of the Faculty of Health Science and the Faculty of Economics and Administrative Sciences at Balıkesir University. This study started with 235 participants, but due to the missing values in post-test and aptitude scores, the study was completed with 152 participants (n_m = 25, n_f = 127). The reason why male students are lower in quantity is that Nursing and Midwifery departments mostly consist of female students and most missing values belong to male participants. According to the OPT pre-test scores, 94 of the students are A1, 56 of the students are A2, and 2 of the students are B1 levels.

Table 1. Information of the Participants

	Gender		**Achievement Level**		
Participants (n)	*M*	*F*	*A1*	*A2*	*B1*
	25	127	94	56	2

The age range of the participants is between 18 and 22 which is an acceptable age range to administer LLAMA aptitude test in order to get healthier results (Rogers et al., 2017). Participants are similar in terms of foreign language education, foreign language levels, mother tongue, past foreign language education opportunities. During their undergraduate education, they have two hours of English class per week. For their language aptitude levels, the distribution of the participants according to their aptitude subtest scores is demonstrated in table 2.

Table 2. Aptitude Levels of the Participants

	LLAMA_B (Vocabulary Learning Task) *n*	**LLAMA_D** (Sound Recognition Task) *n*	**LLAMA_E** (Sound-Symbol Correspondence Task) *n*	**LLAMA_F** (Grammatical Inferencing Task) *n*
Very Poor	11	13	7	9
Average	47	77	22	46
Good	82	59	58	72
Outstanding	12	0	64	21
N*	152	145	151	148

*Some participants couldn't complete the sub-tests for various reasons.

3.3.Tools

In this study, both qualitative and quantitative data collection tools were used. LLAMA, SILL, Oxford Placement Test and semi-structured interview form are the tools used in this study.

3.3.1. LLAMA Aptitude Test

LLAMA is a computer-based language neutral aptitude test developed by Meara (2005). Its language neutral characteristic makes it possible to apply it on

students whose native language is Turkish. It assesses the four aspects of language aptitude:

- B_ Vocabulary Learning
- D_ Sound Recognition
- E_ Sound-symbol Correspondence
- F_ Grammatical Inferencing

B_ Vocabulary Learning test has 20 figures on the screen. The participants are expected to memorise the names of these 20 figures in two minutes and then they can match the names and the figures at their speed. It evaluates the explicit cognitive abilities or explicit language aptitude requiring analytical skills (Granena, 2013).

In D_ Sound Recognition test, participants hear ten sounds, and they have only one chance to listen. After listening, they hear approximately 30 sounds, including the ten sounds they have heard during listening and try to remember the ten sounds they have heard before. This test assesses the working memory and short term memory capacity of the learners. In other words, it evaluates the implicit cognitive ability or implicit language aptitude which requires the series learning competency (Granena, 2013).

In E_ Sound-symbol Correspondence Test, syllables are given as three groups. The first and second groups consist of 9 syllables, and the last group consists of 6 syllables. The participants are given 2 minutes to study these syllables and their recitation, and they are asked to decide on the written form of the word. It assesses the explicit language aptitude (Granena, 2013).

The F_ Grammatical Inferencing test asks participants to deduce the rules of an artificial language in an inductive way. There are 20 boxes on the screen of the test. Clicking each of these boxes displays a picture on the screen, and there is a sentence that identifies it next to each image. At the end of the 5-minute study period, participants must select the correct sentence that identifies the picture they see on the screen. It evaluates the explicit inductive language learning ability or grammatical sensitivity which was called as an analytical ability by Skehan (1998) (Granena, 2013).

Completing the test takes 25-30 minutes for each participant. Tests B, E and F (2 minutes to 5 minutes) allow participants to study on the artificial language, but the response time depends on the participant's speed. For that reason, the duration of application varies from student to student.

3.3.2. Strategy Inventory for Language Learning (SILL)

SILL is a questionnaire prepared by Oxford (1990). In the appendix part of the Oxford's book, it was published as two versions: for those whose native language is English and for the learners of English as a second language (ESL) and a foreign language (EFL). The questionnaire prepared for native English learners consists of 80 items and 50 items prepared for EFL-ESL learners. In this study, the EFL version was used to assess the language learning strategies of the learners.

The SILL is based on Oxford's taxonomy studies in 1986, and it is a Likert-type scale which consists of six sections. There are nine items in part A, 14 items in part B, six items in part C, nine items in part D, six items in part E and six items in part F. Each section corresponds to the learning strategy groups made by Oxford (1986). These groups are memory strategies (part A), cognitive strategies (part B), and compensation strategies (part C) as direct ones and metacognitive (part D), affective (part E) and social strategies (part F) as indirect ones.

3.3.3. Oxford Placement Test (OPT)

Oxford placement test was prepared in 2004 by Dave Allan. It consists of two parts, grammar and listening. There are 100 questions in each section. The listening test is 10 minutes. The Grammar test lasts no more than 50 minutes, but C1 and above students can complete in about half an hour. The total time required for the test is 1 hour at most.

The items that make up the listening test are formed by converting real situations into a test format from a collection of hundreds of dialogues, including native or non-native speakers. The items in the grammar part have been prepared in accordance with the CEF scale by taking into account syllabus and textbooks contents used around the world and with the help of feedback from users.

Both listening and grammar tests were examined on participants from 40 different nationalities for more than five years. Experiments were conducted on both multilingual and monolingual groups, and the reliability of the test was high. Besides, the in-test reliability was checked and the opt results were adapted to the CEF scale, Association of Language Testers in Europe (ALTE), and to many basic language scores in the world based on CEF and ALTE, such as IELTS, TOEFL, TOEIC, Cambridge ESOL, BEC CELS. One pack of the test consists of a total of 80 tests including 40 listening, 40 grammar tests, and guidance of administering and grading the tests.

3.4.Procedure

This study was designed to assess the foreign language aptitude and strategy use of the participants to compare the achievement scores of them in order to find out if there is any relationship between language aptitude, strategy use and achievement.

First of all, participants were informed in detail about the tests and the process of the study. Then, a schedule was set by deciding the periods when they would be suitable for the tests and training to be carried out. Since it was not possible to test all students at the same time, it is clearly arranged which day each participant would participate in which test.

After the planning phase, the implementation of the LLAMA test was started as planned to measure the foreign language aptitude of the participants. The test was applied to 235 students. Since it was impossible to apply one by one- because it takes 25-30 minutes to complete the test by one person, the test was carried out in the laboratory in groups of a maximum of 40 students. Each participant used headphones to minimise the impact of the participants on each other and the environment on the participants. All students were given time to complete a sub-test to prevent students from forgetting the process they would undertake in each test, and then the next sub-test was started. In this way, it was ensured that all participants had a thorough understanding of the instructions and completed each subtest successfully. Under these conditions, the duration of completion of all four tests by the group lasted for approximately one hour. The test was completed in six sessions on different days.

While the implementation of the LLAMA test was in progress, the SILL test and the Oxford Placement Test were applied. As the number of participants was high, these tests were applied in several sessions such as LLAMA test. SILL lasted for approximately 15 minutes, and the achievement test lasted for one hour for each group.

After the completion of all three tests, the 10-week training program was started in order to determine the quick learners who will be able to develop their achievement. Because Erlam (2005) asserts that a deductive learning environment nullifies the language aptitude, the lesson plan was designed with an inductive approach to observe how students use their abilities. The activities for repeating and reminding which enable the improvement of language aptitude were added to the lesson plan by considering the assumptions about instruction types stated Robinson (2007). In this context, animations of fairy tales were used as basic course material, because a tale is a genre that is typically organised in the same way, repeating specific grammar structures and words. Students had the chance to read the subtitles in English while watching the videos. Grammar structures within the videos were discussed with the support of the teacher. In this way, the same kinds of grammar structures have been seen by the student in different sentences in a context.

It took four weeks to complete a fairy tale of 8-9 minutes. Every week the fairy tale was started from the beginning, and the students were reminded again briefly. So the students had the opportunity to review the notes they kept. This process helps to develop metacognitive (paying attention, organizing learning process, taking notes and identifying the purpose), cognitive (repeating, recognizing and using formulas and recombining) and memory (grouping the words and reviewing) strategies as well as the use of aptitude complexes such as noticing the gap (NTG), deep semantic processing (DSP) and metalinguistic rule rehearsal (MRR). In this process, the teller of the fairy tale functions as one side of the interaction -source of the oral and written flood of input- while the teacher was responsible for the negotiation of the meaning. Students were expected to check the difference between their understanding and the notes that they had taken and the correct form presented in a few ways by the teacher. Students' speed, short-term memory and attention are effective in their success.

Since this kind of lesson is a method with which students are not familiar, it takes at least four weeks for them to get used to and get control of their learning. Some students never get used to this system, though. As Robinson (2007) cited from Niwa (2000) individual differences are more leading to difficult structures. Therefore, this type of complex instruction enables students to demonstrate their abilities. Another significant point in the lesson plan is time. Carroll (1959) said anyone who had time and opportunity could learn a foreign language; what distinguishes learners in this process is the learning speed that is primarily based on language aptitude levels of learners. The course plan was kept short and arranged as ten weeks (90mins for each week) since the participants with high ability were expected to be more successful in a short time.

At the end of the training period, OPT were administered to students again as the post-test to find out the difference. With the re-application of OPT, the data collection process ended, and the data were prepared for the analysis.

3.5.Data Analysis

3.5.1. RQ.1- What is the relationship between language aptitude and the achievement (placement test scores) of the learners?

The relationship between language aptitude and the placement scores (achievement) of the learners were investigated under three steps. First, whether there is a significant increase between the pre and the post-test scores of the learners was determined with Paired Samples t-Test. Second, the effect of language aptitude on this increase was investigated, and Paired Samples t-Test was used to reveal the effect of language aptitude levels on achievement scores for each sub-aptitude test. Third, the correlation between language aptitude tests and the learners' achievement was analysed with Pearson Correlation Analysis.

Table 3. Paired Samples t-Test results of the Pre and Post Placement Tests

	M	***SD***	***df***	***t***	***p***
Pre-Test	101.2	9.7			
			151	-4.5	.001
Post-Test	104.9	8.9			

Paired Samples t-Test Analysis results indicate that participants showed improvement after the treatment (M_{pre} = 101.2, SD_{pre} = 9.7; M_{post} = 104.9, SD_{post} = 8.9). This increase in the mean scores between pre and post-tests is statistically significant $t(151) = -4.5$, $p < 0.001$.

In order to find out the effect of language aptitude on this increase, language aptitude level-based increase between the pre and the post-placement test scores were found for each sub-aptitude test with Paired Samples t-Test.

Table 4. Paired Samples Test Results Showing the Language Aptitude Level-Based Increase between the Pre and the Post Placement Test Scores

Apt Level / **Cases**	**LLAAMA_B**		**LLAMA_D**		**LLAMA_E**		**LLAMA_F**	
	Pre*	Post*	Pre*	Post*	Pre*	Post*	Pre*	Post*
Very Poor (148)	102.9	101.8	101.6	101.4	100.8	101.3	102.8	102.9
Average (141)	101.3**	105.6**	100.4**	104.8**	102.7	103.7	102.4	104.5
Good (124)	100.9**	104.7**	102.6**	105.7**	99.4**	104.5**	101.8**	106.1**
Outstanding (126)	102.6	104.3	N/A	N/A	101.5**	105.7**	102.7**	108.5**

*The mean score of the placement test (achievement)

**Significant at 0.05 level

Table 4 shows that for the Very Poor Aptitude Level participants (n_{case} = 148), there is no significant increase in the scores. Average Aptitude Level participants demonstrated significant increase for the LLAMA_B (*MD* = 4.3) and LLAMA_D (*MD* = 4.4) while significant increase was observed for Good Aptitude Level participants in all applicable aptitude sub-tests; LLAMA_B (*MD* = 3.8),

LLAMA_D (*MD* = 3.1), LLAMA_E (*MD* = 5.1) and LLAMA_F (*MD* = 4.3). For the Outstanding Aptitude Level participants, there is a significant increase in LLAMA_E test (*MD* = 4.2) and LLAMA_F test (*MD* = 5.8). Bearing on the results, language aptitude is more effective on language achievement for Good Aptitude Level participants in all sub-test and for Outstanding Aptitude Level participants in LLAMA_E and LLAMA_F tests.

To find out whether there is a correlation between language aptitude tests and with the placement test scores (achievement), Pearson Correlation Analysis was made, and the results were demonstrated in Table 5.

Table 5. The Correlation between Language Aptitude Tests and with the Placement Test Scores (Achievement)

	LLAMA_B	LLAMA_D	LLAMA_E	LLAMA_F
LLAMA_B				
LLAMA_D	.08			
LLAMA_E	.08	.02		
LLAMA_F	.22*	.05	.24*	
Achievement	-.02	.11	.09	.07

*Correlation is significant at the 0.01 level (2-tailed).

Pearson Correlation Analysis revealed that there is no significant correlation between achievement and any of the sub-aptitude tests. However, low correlation was observed between LLAMA_F and LLAMA_B ($r_p(152) = .22$, $p < .001$) and LLAMA_E ($r_p(152) = .24$, $p < .001$).

3.5.2. RQ-2. Is there any relationship between the learners' self-reported strategies and achievement scores?

In order to find out the effect of self-reported strategy use on the achievement scores of the participants, Multivariate Linear Regression Analysis was made and the analysis results revealed that self-reported strategy use has no significant effect on the achievement (placement) test scores of the learners ($F(6, 135) = 1.76$, $p = 0.11$).

3.5.3. RQ-3. What strategies did the participants report based on their language aptitude and achievement levels?

Table 6. Strategy Domain Mostly Reported by the Participants Based on Their Language Aptitude Levels

Apt Level / Cases	LLAAMA_B	LLAMA_D	LLAMA_E	LLAMA_F
	Strategy Domain			
Very Poor (148)	Social	Social	Social	Social
Average (141)	Social	Social - Memory	Compensation	Social
Good (124)	Social	Social	Memory	Social
Outstanding (126)	Social	-	Social	Memory

The descriptive analysis made on the reported strategies of the participants revealed that Social Strategies are the most commonly used strategies for all aptitude levels while Memory strategies are the most common for the good aptitude level learners in LLAMA_E and LLAMA_F tests. Additionally, Compensation strategies are mostly favoured by the average aptitude level learners in LLAMA_E test.

Table 7. Strategy Domain Mostly Reported by the Participants Based on Their Achievement Levels

A1 (*n* = 71)			**A2 (*n* = 67)**			**B1 (*n* = 5)**		
Strategy	***M***	***SD***	**Strategy**	***M***	***SD***	**Strategy**	***M***	***SD***
Social	3.08	1.00	Social	3.05	1.12	Memory	3.20	0.45
Memory	2.98	0.70	Memory	2.90	0.73	Metacognitive	3.12	1.17
Compensation	2.80	1.00	Compensation	2.88	0.99	Social	2.91	0.96
Metacognitive	2.57	0.97	Metacognitive	2.83	1.03	Compensation	2.89	1.11
Affective	2.52	0.83	Affective	2.56	0.90	Affective	2.55	0.88
Cognitive	2.33	0.75	Cognitive	2.45	0.76	Cognitive	2.54	0.38

Frequency analysis made on the reported strategies unveiled the most common strategy domain based on the achievement levels of the learners. For the A1 (n = 71) and A2 (n = 67) learners social strategies are the most dominant strategy domain (M_{A1} = 3.08, SD_{A1} = 1, M_{A2} = 3.05, SD_{A2} = 1.12) while the most common strategy domain used by the B1 learners are memory strategies (M_{B1} = 3.20, SD_{B1} = 0.45).

3.5.4. RQ-4. What is the relationship between achievement, self-reported strategies based on the clusters determined by the LLAMA tests?

First, in order to determine how many aptitude profiles are there based on the LLAMA scores, TwoStep Cluster Analysis was made. The Cluster Analysis results indicate three aptitude profiles with fair cluster quality.

Table 8. The Aptitude Profiles Determined by the Cluster Analysis

	Profile 1	**Profile 2**	**Profile 3**
Size	*n* = 47 (32.6%)	*n* = 60 (41.7%)	*n* = 37 (25.7%)
Inputs	LLAMA_E	LLAMA_E	LLAMA_B
	M = 76.28	*M* = 76.17	*M* = 44.59
	LLAMA_F	LLAMA_B	LLAMA_F
	M = 70.32	*M* = 50.58	*M* = 40.81
	LLAMA_B	LLAMA_F	LLAMA_E
	M = 56.70	*M* = 42.00	*M* = 35.14
	LLAMA_D	LLAMA_D	LLAMA_D
	M = 42.02	*M* = 24.67	*M* = 33.38

TwoStep Cluster Analysis revealed three aptitude profiles. Profile 1 comprises participants who have high scores in all aptitude sub-tests (n = 47). Learners of Profile 1 had the highest scores on Sound Symbol Correspondence sub-test (LLAMA_E) while the lowest scores belong to Sound Recognition Test (LLAMA_D). Profile 2 is the one which has the most participants (n = 60). Within the group, they scored best in Sound Symbol Correspondence test (LLAMA_E) while the lowest scores are in Sound Recognition Test (LLAMA_D). The lowest LLAMA_D score in all profiles belongs to Profile 2. Profile 3 participants did better in Vocabulary Learning Test (LLAMA_B) and worst in Sound Recognition Test (LLAMA_D). However, though this group has the lowest scores in all sub-tests, Sound Recognition Test scores of this group are higher than the Profile 2 participants' Sound Recognition Test scores.

In order to find out the relationship between achievement and reported strategies of aptitude profiles, One Way ANOVA analysis was conducted and no significant relationship was found ($F(2, 137) = 0.41$, $p = 0.67$).

3.5.5. RQ-5. What are the underlying reasons in the increase and decrease in OPT scores other than the effect of aptitude scores and strategy use?

This research question was added after comparing the language aptitude levels of the students who showed high and low success according to OPT test results after the data analysis was completed. According to the comparison results, there were 4 participants with high aptitude scores and significant increase in OPT score, 2 participants with high aptitude scores and significant decrease in OPT score, 1 participant who had a low aptitude score but had a significant increase in OPT and 1 participant with low aptitude scores and a significant decrease. A semi-structured interview was conducted with these participants to unveil the reasons behind this increase and decline that are not related to aptitude and strategy. The participants were informed about the test results and were asked 6 questions. The questions are as follows:

1) How do you interpret your test scores?
2) Do you want to learn English? Do you believe it's necessary?
3) Do you have anxiety about language learning? Do you feel tense during the lesson or in the exams?
4) Do you think that you can reflect the knowledge you have in the exams and the aptitude test?
5) Do you think that this 10-week training is different from the one you received before?
6) Do you like playing intelligence developer, thought-provoking puzzle style games? Do you play often?

The aim of these questions is to determine the awareness, motivation and anxiety level, the perspective of these participants to the course design, their background education style and the effects of logic games on their language aptitude level and achievement.

The answers of the participants were examined in 4 groups:

- 1st Group: High aptitude score and a significant increase in OPT (n = 4):

The aptitude levels of the participants in this group are high, and 2 participants use metacognitive strategies according to SILL. One of the other two participants uses memory and compensation strategies equally, while the other uses the affective strategies well.

Table 9. Test Scores of the Participants in the First Group

Students	Pre-	Post-	MD	LLAMA_B	LLAMA_D	LLAMA_E	LLAMA_F	Strategy
S1	89	113	24	60	50	50	60	Compensation Memory
S2	103	124	21	55	50	90	80	Metacognitive
S3	98	118	20	70	45	60	80	Affective
S4	97	112	15	60	45	60	60	Metacognitive

When the answers of the participants in this group were examined, it was seen that they could not analyse their own success much. Only one of them (S2) gave a detailed answer to the first question "... *I do not know the reason for the difference (the increase), but I'm trying to take notes as much as I can. I may have learned the new words and this learning new words and taking note may have helped* ..." This participant is good at using metacognitive strategies according to SILL, and this shows that S2 has a high awareness of strategy use.

All participants reported high levels of motivation in this group. While 3 participants stated that the anxiety level was high, S3 stated that she did not have any anxiety. S3 also reported that she is using affective strategies well according to SILL and this shows the awareness of the participant about her strategy use.

While 3 participants in the group stated that they found the 10-week training useful, one participant stated that she did not benefit, and she attributed her success to her previous education. S2 who uses metacognitive strategies well and thinks that education is beneficial increased by 21 points while S4 who thinks that it is not useful increased by 15 points. S2 who has a positive opinion about the ten-week

education said "*Our teacher has a different style of lecturing. She handles the subjects without applying pressure to us. It made me feel comfortable. I learned it more easily."* This answer reflects her successful use of metacognitive strategies. Therefore, she thinks that organising her own learning makes her relax and more successful. One of the two participants who use metacognitive strategies is satisfied with the training given, and the other is not satisfied. In this case, LLAMA subtest results were compared in order to understand what can be the determiner about their perspectives to the course. Positive participant's subtest results are; LLAMA_B: 55, LLAMA_D: 50, LLAMA_E: 90, LLAMA_F: 80 and negative participant's subtest results are LLAMA_B: 60, LLAMA_D: 45, LLAMA_E: 60 and LLAMA_F: 60. It may show especially the importance of LLAMA_E and F as a determiner of the participants' ideas about the inductive design of the course.

In the last question, participants were asked whether they like to play puzzle-style intelligence developer games or not and if they play often. Three participants said they loved and played frequently, but one participant said she loved it but did not play.

- 2nd Group: High aptitude scores but a significant decrease in OPT (*n* = 2):
  The aptitude level of the participants in this group is high but they showed a significant decrease in their OPT scores (*MD* = -24 and -18). One of the participants uses the compensation strategies well, and the other one uses social ones.

Table 10. Test Scores of the Participants in the Second Group

Students	Pre-	Post-	MD	LLAMA_B	LLAMA_D	LLAMA_E	LLAMA_F	Strategy
S5	115	91	-24	50	50	80	70	Compensation
S6	112	84	-18	50	70	70	80	Social

The answers to the first question indicate that both participants did not give importance to post-test as much as they gave to pre-test. When the answers to the other questions were analysed, it was determined that the participants were willing to

learn and they believed the need to learn foreign languages. However, both of them stated that it was difficult for them to learn a foreign language and the failure in language learning decreased their motivation. Both participants stated that they did not have anxiety.

S5 who uses compensation strategies most stated that she found the way of the training they received much more useful than the previous training. S6 who uses social strategies most stated that the previous education was based on memorisation and it was easy but that 10-week training style, which requires her to organise her learning, was difficult for her.

In the last question, both participants stated that they liked these types of games but did not play very often.

- 3rd Group: Low aptitude score but a significant increase in OPT (*n* = 1):
  This participant has a low aptitude level in LLAMA_B, LLAMA_E and LLAMA_F while she has a good aptitude in LLAMA_D:40 (40-60 are considered good) and she reported the social strategies according to the SILL results. She showed an increase of 21 points according to the OPT results and increased from A1 level to almost level B1.

Table 11. Test Scores of the Participant in the Third Group

Students	Pre-	Post-	MD	LLAMA_B	LLAMA_D	LLAMA_E	LLAMA_F	Strategy
S7	98	119	21	30	40	40	30	Social

While interpreting her results, S7 said: "*I was a little excited when I was doing the tests on the computer. That made me panic. I realised that I was a little confused*." She also expressed her willingness to learn English and language learning was necessary. On the other hand, she said that she was worried when she could not answer questions in class or exams.

About the design of the course, she said "*I had never received this kind of training until this time. It was different in the first days. Now I think I'm used to. I have learned in the past years in the form of memorisation. I think this kind of*

education is intended to destroy this method (memorisation). It may be useful, but I need more time to comment."

For the last question, she stated that she does not play puzzle types games very often, but she enjoys playing with her friends.

- 4th Group: Low aptitude score and a significant decrease in OPT (n=1):

  This participant has a low aptitude level in LLAMA_B, D and F while she has an outstanding aptitude in LLAMA_E. She showed a decrease of 11 points according to OPT results, and she uses the memory strategies most.

Table 12. Test Scores of the Participant in the Fourth Group

Student	Pre-	Post-	MD	LLAMA_B	LLAMA_D	LLAMA_E	LLAMA_F	Strategy
S8	114	103	-11	45	35	90	30	Memory

In the interview, she stated that she feels very anxious in English exams with the fear of not understanding the sentences or not knowing the meaning of the words. She attributes her decrease to her anxiety and thinks that she did not reflect her all knowledge to the tests. She wants to learn English, and she believes the necessity of learning a foreign language. She says that her previous education was different from the ten-week intervention and she finds the listening part useful for the pronunciation particularly. For the last question, she states that she likes to play such games, but she only plays on holidays or mobile applications.

4. DISCUSSION

This study investigated the relationship between language aptitude, strategy use and achievement in Turkish EFL context. In order to find out the decisiveness of aptitude and strategy use on achievement, LLAMA aptitude tests, SILL and OPT were administered, and the results were analysed.

The first question was about the relationship between language aptitude and achievement. Firstly, it was investigated whether there was a significant relationship between the pre-test and post-test results of the participants. After a significant increase was found, the role of the language aptitude in this increase was also analysed with paired samples t-test for all aptitude levels in each subtest.

The results demonstrated that there is no significant relationship between language aptitude and the achievement of the participants who have low aptitude level in all subtests. However, there is a significant relationship between the language aptitude and the achievement of the learners who have good aptitude and outstanding aptitude level. That means that language aptitude has a significant effect on the language learning achievement. The results are consistent with the studies that demonstrated the success of prognosis tests in prediction of achievement (Stoddard & Vander Beke, 1925; Henmon, 1929; Carroll & Sapon, 1959; Pimsleur, 1964; Service,1992; Ehrman, 1994; Grigornko, Sternberg & Ehrman (2000); Meara, 2005). It is worth to note that Pearson Correlation Analysis does not show any significant correlation between achievement and LLAMA subtests.

Besides, the relationship between the language aptitude and achievement level of the learners who have an average level of aptitude is significant in LLAMA_B and LLAMA_D tests. It means that having an average language aptitude level in LLAMA_B and D can show the possibility of success. On the other hand, LLAMA_B does not have any significant relationship with the achievement of the learners who have outstanding aptitude level.

The second question was about the relationship between the reported strategy use of the learners and the achievement. According to results, there is no significant relationship between the overall self-reported strategy use of the participants and the achievement. That means that strategy use is not a determiner in learners' success. The reason for this result may be that participants are only at level A1, A2 and B1. These scores are not very high according to OPT, because there is no participant in C1 and C2 level. Khalil (2005) and Green & Oxford (1995) state that the competence level of the learners influences the overall strategy use of the learners. The absence of high-level participants in this study may have influenced the relationship between the overall strategy use and success.

The third question was about the self-reported strategy use of the participants based on their aptitude and achievement level. The descriptive analysis demonstrated that participants with low skills in all subtests use social strategies most often. While average level participants in LLAMA_B and F use the social strategies most, average level learners in LLAMA_D and E report the memory and compensation strategies. Good level learners use social strategies in all subtest except LLAMA_E (memory strategies), and outstanding level learners similarly use social strategies except LLAMA_F (memory strategies). The results show that there are no changes in the use of strategy depending on the aptitude levels of the learners and LLAMA subtests. Social strategies are the most commonly used strategies at all levels and subtests.

Frequency analysis demonstrated the self-reported strategy use of the learners based on their achievement level. According to results, participants in A1 and A2 levels use the same strategies and the social strategies are the most widely used while cognitive strategies are the least used. B1 level learners use memory strategies most and cognitive strategies least.

Many studies emphasise that the use of strategy varies according to the achievement level, and metacognitive strategies are the most used strategy group by successful students (Rubin, 1975; 2001; Oxford, 1990; Green & Oxford, 1995; Takeuchi, 2003). Table 7 confirms these studies. A1 and A2 level learners cannot use the metacognitive and cognitive strategies which are commonly used by successful learners. They also cannot use the effective strategies which have a significant relationship with metacognitive strategy use and a role in the success (Phakiti, 2003).

On the other hand, B1 level learners mostly use metacognitive strategies after memory strategies. It suggests that the use of metacognitive and cognitive strategies in C1 and C2 students may be higher.

Griffiths (2004) described in detail the phase of conceptualisation and grouping of learning strategies and mentioned the apparent discrimination between the learning strategies and communication strategies until Rubin (1981). He mentioned Ellis (1985, p.73) as another scholar who separated the strategies as for learning and using ones. He stated that Ellis (1985) discussed the possibility of successful use of social strategies to prevent the use of learning strategies. Ellis (1985) thought that if this social characteristic makes up for the lack of language skills, it may make the requirement for learning unnecessary. This opinion may explain the social strategy use of A1 and A2 level learners as the most common one.

The fourth question was about the relationship between the achievement and self-reported strategy use based on the clusters determined by the LLAMA. Firstly, Cluster analysis was made in order to determine the aptitude profiles. Cluster analysis determined three aptitude profiles based on the LLAMA scores. Table 8 demonstrates these profiles and the mean scores of the participants in all subtests. Profile 1 has good or outstanding aptitude level in all subtests of the LLAMA. Highest scores belong to the LLAMA_E (Sound Symbol correspondence task), and lowest scores belong to LLAMA_D (Sound recognition task). Profile 2 has the most participants. It has outstanding aptitude level in LLAMA_E and good aptitude level in LLAMA_B and LLAMA_F, but it has an average aptitude level in LLAMA_D. Profile 3 has an average aptitude level in all subtests of LLAMA. However, it has a higher score in LLAMA_D than Profile 2. Profile 2 has the lowest LLAMA_D scores among the three groups.

It shows that LLAMA_B, LLAMA_E and LLAMA_F (vocabulary learning task, sound-symbol correspondence task and grammatical inferencing task) are associated with each other. The scores of these three aptitude areas increase and decrease together. Otherwise, LLAMA_D scores move separately. While LLAMA_B, E and F scores are high in Profile 2, LLAMA_D has the lowest score in Profile 2 among all profiles. Similarly, while LLAMA_B, LLAMA_E and LLAMA_F scores are very low in Profile 3, LLAMA_D score is higher than Profile

2. Grenena (2013) reached the same results and attributed this relationship to the practice time which LLAMA_B, LLAMA_E and LLAMA_F tasks have. Grenena (2013) states that this practice period ranging from 2 to 5 minutes causes students to develop strategies. LLAMA_D does not have practice period, and students cannot develop strategy while completing the task. It means that LLAMA_B, E and F assess the explicit language aptitude requiring analytical skills while LLAMA_D assess the implicit language aptitude requiring series learning competency. Grenena (2013) also states that this increase and decrease in the scores of the subtests prove the existence of the different aptitude profiles.

After determining profiles, One Way ANOVA analysis was conducted to find out the relationship between three profiles, achievement and strategy use. Results demonstrated that there is no significant relationship between the three aptitude profiles determined by LLAMA and OPT scores and the strategy use of the learners. Since there are no participants at C1 and C2 level, the existing profiles are only determined among the students at level A1, A2 and B1. Because these learners are not very successful, this may have affected the relationship among the aptitude profiles, achievement and strategy use.

The last question is about the reasons behind the excessive rise and fall in the OPT scores. The students who showed the highest increase and decrease were identified, and their aptitude levels were compared. The strategy area each one used the most was also determined. Four learners showed a significant increase in OPT scores and had good or outstanding aptitude level in all subtests. Two learners showed a significant decrease in the OPT scores although they had good or outstanding aptitude level in all subtests. Unlike them, there is one student who showed a significant increase even though she had a low-level aptitude in all subtests except LLAMA_D (40). She can be accepted as good because the good aptitude score is between 40 and 60 in LLAMA_D. Also, there is one learner who has low aptitude level and a significant decrease in OPT scores.

These eight students were interviewed in order to understand the reasons behind the rise and fall beyond the strategy use and aptitude. Although the number of samples is not enough to generalise the results, the data provided valuable information about individual differences and success. The results reflected

participants' awareness, motivation, anxiety levels and perspectives about the intervention. The interview results show that the participants are not very conscious about their success and aptitude levels. This unawareness is an indication of why the ability test is better applied to individuals aged 18 and over (Rogers, Meara, Barnett-Legh, Curry & Davie, 2017). Although the age range differed from 18 to 22 in this study, most of the participants were 18 years old. On the other hand, successful learners in Table 9, notably S2 and S3, have awareness about the strategy use of themselves.

All of the participants reported their willingness to learn English and believe the significance of learning a foreign language. Although it shows their high motivation to learn, 2nd group participants who have a decrease in the OPT scores - (S5, S6) - state that learning a language is a complicated process for them and making mistakes make reduces their motivation.

When the answers of the 8 participants analysed, there are four groups of learners according to their OPT scores and aptitude levels (Tables 9, 10, 11, 12). Five of the participants said that they feel anxious in the language learning process and exams and 3 of them expressed no anxiety. One of these three students, S3 in table 9, is a member of the first group, high aptitude score and a significant increase in OPT scores. Other two learners, S5 and S6, are the members of the second group, high aptitude scores but a significant decrease. Except for these three learners, all group learners have anxiety. It shows that anxiety and motivation do not have a decisive effect on the aptitude level of these 8 participants. S3 is a successful learner who has a high aptitude level and uses Affective Strategies. Her answer about the anxiety supports her strategy use according to SILL and shows her awareness. S5 and S6 have a significant decrease in OPT although they have high aptitude scores and stated no anxiety. In this case, their lack of concern turned into indifference and ultimately affected both their motivation and success despite the high aptitude level.

Participants' perspective about the ten-week course is positive except one learner. All of them stated that they find it useful although it was different from their previous experiences and they had difficulties in the first weeks. Only S4 stated that the course was not beneficial for her even though she had a significant increase in OPT scores. Considering that the ten-week training was designed with an inductive

method to enable participants to show their aptitudes and use strategies, the strategy use and aptitude level of this student was compared with the other participants'. Another learner, S2, was also using metacognitive strategies such as S4, and she had a high aptitude level and was successful according to the OPT results. Although both participants (S2 and S4) showed similar achievements, one of them stated that the course was very suitable for her, while the other stated that it was not useful. When the LLAMA subtests scores were analysed, S2's results were: LLAMA_B: 55, LLAMA_D: 50, LLAMA_E: 90, LLAMA_F: 80 and S4's results were: LLAMA_B: 60, LLAMA_D: 45, LLAMA_E: 60 and LLAMA_F: 60. The only difference between these two participants was between the scores obtained from LLAMA_E (Sound-symbol Correspondence Task) and F (Grammatical Inferencing Task). While S2 has an outstanding level of aptitude in LLAMA_E and F, S4 has a good level of aptitude. This difference may explain the perspective of the participants to the inductive course design.

The last question in the semi-structured interview was about the relationship between the intelligence developer, thought-provoking puzzle style games and aptitude level of the learners. When the answers of the learners were analysed, playing these types of games does not have any effect on the LLAMA aptitude level of the learners as Rogers, et al. (2016) stated.

5. CONCLUSION

Language aptitude, strategy use and achievement, and their impact on each other is considered among the most contradictive subjects of language acquisition process by many researchers. While some researchers think that aptitude (Stoddard & Vander Beke, 1925; Carroll & Sapon, 1959; Snow, 1991; Parry & Stansfield,1990; Ehrman, 1994; Robinson, 2007; Granena, 2013; Meara,2005; Rogers et.al, 2016; Skehan, 2016) and strategy (Rubin, 1975;2001; Oxford, 1990; O'Malley, Chamot, Stewner-Manzanares, Russo & Küpper, 1985; Chamot, 2005; Cohen, 2006) are factors that determine the achievement, some say that this effect is not so meaningful or that the domain of influence should not be considered too broad (Krashen, 1981; VanPatten & Smith, 2015; Cook, 2016).

The studies, which have been shaped by the changing aptitude perspective after the 90s, have been more about how individual differences can be better reflected in the teaching process. The extent to which aptitude is influenced by other individual differences and how the results reflect on success is the focus of the studies. Therefore, this study investigated the decisiveness of aptitude on success and how other individual differences, particularly strategy use, affect this decisiveness in Turkish EFL context.

As in many other studies, this study found out that language aptitude is an effective factor on the foreign language learning achievement. It shows that LLAMA scores can be used to identify students who can learn a foreign language successfully in a short time. According to the results of this study, language aptitude level and aptitude types do not have any correlation with strategy use, while strategy domains of the learners have a strong relationship with their achievement level. Even if aptitude and strategy are not interrelated, both have a significant impact on achievement. Since the language learning is a process, it should be kept in mind that

aptitude level and the use of strategy alone is not enough to explain the success. All other individual differences, such as motivation and anxiety, have an impact on the success of individuals, whether or not they are linked. Therefore, they should be considered in the course plan preparation process.

6. IMPLICATIONS

Language aptitude testing aims to find out the learners who can learn a foreign language in a short time. As Carroll (1959) said language learning is a matter of time and opportunity, and everybody can learn a language if there is enough time. Therefore, the focus of aptitude testing is to determine the quick learners.

The real issue is the question of who these students are who need to learn fast. At standard primary, secondary and high school levels, there may be no need for students to learn a language quickly except for their personal needs. However, if the professional development of the students at the university level and the international training are considered, it can be essential to identify the students who can learn fast and to train them as soon as possible when they need. Similarly, in the occupational groups where foreign language education is required, it is necessary to identify the personnel who can learn the language in a short time.

Aptitude tests are designed to determine whether a person can learn any language in a short time, not only English. For this reason, considering the occupational groups and the foreign languages that they need, aptitude tests are needed in a wide range. When we look at the use of language aptitude tests in the world and their purpose of emergence, these tests are mostly used by governmental organisations such as the army, CIA, FBI and FSI. Many studies mentioned the importance of training the soldiers and the pilots in the languages of the countries where they will serve during the war and the benefits of this training. Aggeler (1950) mentions the Army Language School, 21 languages which were taught in this school in a short time and how this method - the Army Method- transformed into Audiolingual Method in the SLA. This process demonstrates the importance of the language aptitude tests and the studies carried out in this field, starting from the language education of the individuals who have a central position for the country, to the language education which should be given during the vocational education in universities or ESP.

Before LLAMA, other aptitude tests could not be administered to people whose native language was Turkish for the reasons mentioned in the thesis. Therefore, the studies in this field have been possible only after 2005 in the Turkish context. This study was carried out to determine the extent to which the LLAMA aptitude test can predict the Turkish students' achievement in language learning. Results showed that language aptitude has an influence on the language learning achievement of the Turkish EFL learners and that means that determining aptitude can give information about the learners who can learn a foreign language successfully in a short time.

Language aptitude and other individual differences are neglected subjects in foreign language learning in Turkey. It is ignored that not everyone can learn a foreign language in a short time, or that they must receive appropriate training for their individual differences. Identifying the aptitude level or strategy use of the learners enables the teachers to prepare appropriate lesson plans to their students' learning styles. On the other hand, particularly for ESP groups that need to learn a language in a short period of time, the training of the individuals by considering the aptitude levels and strategy use of them will save time. Therefore, there is a need to develop the aptitude and strategy tests until the best result is achieved in Turkish context. As a result, this study will make contributions on the field of language aptitude studies in Turkey by shedding light on the points where the researchers can focus on.

7. SUGGESTIONS FOR FURTHER RESEARCH

Participants in this study are at the level of A1, A2 and B1 according to OPT results. When their achievement and proficiency scores were compared with overall strategy use of them, any correlation wasn't found. Khalil (2005) and Green and Oxford (1995) claimed that competency level of the learners affects the overal strategy use of the learners. Since this study does not have any participants at C1 and C2 level , it is possible to get different results with a participant group including C1 and C2 level learners.

Similarly, participants' strategy use was analysed according to their proficiency levels. Results were compatible with the literature that stated that successful learners can use metacognitive, cognitive and affective strategies well. (Rubin, 1975; 2001; Oxford, 1990; Green & Oxford, 1995; Takeuchi, 2003; Phakiti, 2003). This study demonstrated that A1 and A2 level learners cannot use metacognitive and cognitive strategies well and they also cannot use affective strategies which has a significant relationship with metacognitive strategies and a role on success. On the other hand, B1 level learners can use metacognitive strategies well after the memory strategies. This may suggest that C1 and C2 level learners can use metacognitive, cognitive and affective strategies well. Since this study doesn't include any participant at C1 and C2, it is not possible to see the strategy domain of these participants in this study. Another research may be done to see the strategy domains of the C1 and C2 level learners.

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9. APPENDICES

9.1. Appendix 1. Turkish Translation of the Strategy Inventory for Language Learning

Dil Öğrenimi Strateji Envanteri

Bu dil öğrenimi strateji envanteri , yabancı bir dili öğrenen öğrenciler için hazırlanmıştır. Lütfen her ifadeyi okuyun ve ifadenin size göre doğruluğunu 1 ile 5 arasında derecelendirin.

1. Asla ya da neredeyse hiç katılmıyorum
2. Pek sayılmaz
3. Kısmen katılıyorum
4. Genelde katılıyorum
5. Her zaman katılıyorum

Aşağıdaki yargıların sizi ne derece ifade ettiğine göre cevaplarınızı veriniz. Olması gereken ya da insanların düşündüğü cevapları vermekten kaçının. Cevaplarınız, doğru ya da yanlış olarak değerlendirilmeyecektir.

A. BÖLÜMÜ

1. Yabancı dil öğrenirken eski bilgilerim ve yeni bilgilerim arasındaki ilişkilere dikkat ederim.
2. Daha kolay hatırlayabilmem için yeni öğrendiğim kelimeleri cümle içinde kullanırım.
3. Yeni öğrendiğim kelimeleri daha kolay hatırlayabilmem için kelimenin okunuşu ile bir resim ya da kelimenin görseli arasında bağlantı kurarım.
4. Yeni öğrendiğim kelimeleri, kelimenin kullanılabileceği durumlarla ilgili zihinsel çağrışımlar kurarak hatırlamaya çalışırım.
5. Yeni öğrendiğim kelimeleri hatırlamak için kafiye kullanırım.
6. Yeni öğrendiğim kelimeleri hatırlamak için kelime kartları kullanırım.
7. Yeni öğrendiğim kelimelerin anlamlarını fiziksel olarak canlandırırım.
8. Yabancı dil dersi için sıkça tekrar yaparım.
9. Yeni öğrendiğim kelimelerin kitap sayfasındaki, tahtadaki ya da sokak tabelalarındaki yerini göz önüne getirerek, onları hatırlamaya çalışırım.

B. BÖLÜMÜ

10. Yeni öğrendiğim kelimeleri birçok kez yazar ya da tekrarlarım
11. Ana dili konuşan kişiler gibi konuşmaya çalışırım.
12. Yabancı dil öğrenirken okunuşlar üzerine çalışırım.
13. Öğrendiğim kelimeleri farklı şekilde kullanırım.
14. Yabancı dilde bir konuşmayı başlatabilirim.
15. Yabancı dildeki televizyon programlarını izlerim ya da filmlere giderim.
16. Yabancı dilde kitap okumaktan hoşlanırım.
17. Yabancı dilde not, mesaj, mektup ya da rapor yazarım.
18. Yabancı dilde bir parçayı önce tararım (hızlıca göz atarım) daha sonra başa dönerek dikkatli okurum.
19. Kendi dilimde ve yabancı dildeki benzer kelimeleri bulmaya çalışırım.
20. Yabancı dildeki kalıpları bulmaya çalışırım.
21. Yabancı dildeki bir kelimenin anlamını, anlayabileceğim şekilde parçalara bölerek bulurum.
22. Kelime kelime çeviri yapmaktan kaçınırım.
23. Yabancı dilde okuduklarımın ya da duyduklarımın özetini çıkarırım.

C. BÖLÜMÜ

24. Bilmediğim kelimeler tahmin ederek anlamaya çalışırım.
25. Yabancı dilde konuşma esnasında anlamını bilmediğim bir kelime olursa hareketlerle anlatmaya çalışırım.
26. Yabancı dilde anlamını bilmediğim bir kelime olursa yeni kelimeler uydururum.
27. Yabancı dilde okuma yaparken her kelimenin anlamına tek tek bakmam.
28. Yabancı dilde karşımdaki insanların ne söyleyebileceğini tahmin etmeye çalışırım.
29. Eğer bir kelimenin anlamı aklıma gelmezse, aynı anlama gelebilecek bir kelime ya da kalıp kullanırım.

D. BÖLÜMÜ

30. Yabancı dili kullanabilmek için olabildiğince çok farklı yol geliştirmeye çalışırım.
31. Yabancı dilde kendi hatalarımı farkına varırım ve bu bilgi kendimi geliştirmeme yardımcı olur.
32. Yabancı dilde konuşan birisini gördüğüm zaman dikkat ederim.
33. Yabancı dilde nasıl daha iyi bir öğrenci olabileceğim ile ilgili araştırma yaparım.
34. Zamanımı, yeterli derecede yabancı dil çalışabileceğim şekilde planlarım.
35. Yabancı dilde konuşabileceğim kişiler bulmaya çalışırım.
36. Yabancı dilde olabildiğince fazla okumak için fırsatları araştırırım.
37. Yabancı dilimi geliştirebilmek için belirlediğim net hedeflerim vardır.
38. Yabancı dili öğrenirken gelişimime dikkat ederim.

E. BÖLÜMÜ

39. Yabancı dil öğrenirken endişeli olduğumda kendimi sakinleştiririm.
40. Yanlış yapmaktan korksam da yabancı dili konuşma konusunda çabalarım.
41. Yabancı dilde başarılı olduğumda kendimi ödüllendiririm.
42. Yabancı dil çalışırken ya da kullanırken gergin olduğumda bunu fark ederim.
43. Dil öğrenme günlüğüme hissettiklerimi yazarım.
44. Yabancı dil öğrenirken neler hissettiğim konusunda arkadaşlarımla konuşurum.

F. BÖLÜMÜ

45. Yabancı dilde anlamadığım bir ifade olduğunda, karşımdaki kişiden yavaş bir şekilde bunu tekrar söylemesini isterim.
46. Yabancı dil konuşurken karşımdaki kişiden beni düzeltmelerini isterim.
47. Diğer öğrenciler ile yabancı dil alıştırmaları yaparım.
48. Yabancı dil konuşan kişilerden yardım isterim.
49. Yabancı dilde sorular sorarım.
50. Yabancı dili konuşan kişilerin kültürlerini öğrenmeye çalışırım.

8.2. Appendix 2. Research Permission for the Faculty of Economics and Administrative Sciences

Evrak Tarih ve Sayısı: 20/03/2019-E.14454

T.C.
BALIKESİR ÜNİVERSİTESİ
İktisadi ve İdari Bilimler Fakültesi Dekanlığı

Sayı : 11609012-044-
Konu : Anketler

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜNE

Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi tezli yüksek lisans programı öğrencisi Gamze Yavaş ÇELİK'in "İngilizceyi Yabancı Dil Olarak Öğrenen Öğrencilerin (İYDOÖ) Dil Yatkınlık Testi, Standart Test ve Ders Başarılarının Sonuçlarına Yönelik Karşılaştırmalı Bir Çalışma" konulu yüksek lisans tezine yönelik veri toplamak amacı ile hazırlanan araştırmayı Fakültemiz öğrencileri ile yapması Dekanlığımızca uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

e-imzalıdır
Prof. Dr. Tamer BOLAT
Dekan V.

Ek :
İlgi yazı ve ekleri

Dağıtım:
Gereği:
İktisat Bölüm Başkanlığı
İşletme Bölüm Başkanlığı
Uluslararası Ticaret ve Lojistik Bölüm Başkanlığı
Maliye Bölüm Başkanlığı
Siyaset Bilimi ve Kamu Yönetimi Bölüm Başkanlığı

Bilgi:
Sosyal Bilimler Enstitüsü Müdürlüğü

İktisadi ve İdari Bilimler Fakültesi Çağış Yerleşkesi 10145 Balıkesir Ayrıntılı bilgi için irtibat: Cengiz Esen
Tel: Faks: 2662493414
E-Posta: bauiibf@balikesir.edu.tr Elektronik ağ: http://iibf.balikesir.edu.tr/

Evrak Tarih ve Sayısı: 20/03/2019-E.14359

T.C.
BALIKESİR ÜNİVERSİTESİ
Sosyal Bilimler Enstitüsü Müdürlüğü

Sayı : 20381301 -300-
Konu : Öğrenci İşleri (Gamze Yavaş ÇELİK)

İKTİSADİ VE İDARİ BİLİMLER FAKÜLTESİ DEKANLIĞINA

İlgi : Yabancı Diller Eğitimi Anabilim Dalı Başkanlığının 06/03/2019 tarihli ve 76630400/300/11737 sayılı yazısı.

Enstitümüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi tezli yüksek lisans programı öğrencisi Gamze Yavaş ÇELİK'in "İngilizceyi Yabancı Dil Olarak Öğrenen Öğrencilerin (İYDOÖ) Dil Yatkınlık Testi, Standart Test ve Ders Başarılarının Sonuçlarına Yönelik Karşılaştırmalı Bir Çalışma" konulu yüksek lisans tezine yönelik veri toplamak amacı ile hazırlanan araştırmayı Fakültenizde uygulama yapması için gerekli iznin alınmasının gerekmektedir.

Bilgilerinizi ve adı geçen öğrencinin araştırmasını yapabilmesi için gerekli iznin alınması hususunda gereğini arz ederim.

e-imzalıdır
Prof. Dr. Kenan Ziya TAŞ
Enstitü Müdürü

Ek :
1- Dilekçe
2- Ders planları

Dağıtım:
İktisadi ve İdari Bilimler Fakültesi Dekanlığı
Sağlık Bilimleri Fakültesi Dekanlığı

Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Çağış Yerleşkesi 10145 Balıkesir Ayrıntılı bilgi için irtibat: Ferhat Yıldırım
Tel: 2666121400-1402 Faks: 2666121307
E-Posta: sbe@balikesir.edu.tr Elektronik ağ: sbe.balikesir.edu.tr

T.C.
SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ
Yabancı Diller Eğitimi Anabilim Dalı Başkanlığı

Sayı : 76630400-300-
Konu : Öğrenci İşleri (Gamze Yavaş ÇELİK)

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜNE

Anabilim Dalımız Dr.Öğr.Üyesi Fatih YAVUZ'un Tezli Yüksek Lisans Programı öğrencisi Gamze Yavaş ÇELİK' ın tez çalışması kapsamında Balıkesir Üniversitesi Sağlık Fakültesi ve İktisadi ve İdari Bilimler Fakültesinde uygulama yapması için gerekli iznin alınması istedikleri dilekçesi ve çalışma örnekleri ilişikte sunulmuştur.

Bilgilerinizi ve gereğini arz ederim.

e-imzalıdır
Prof. Dr. Dilek İNAN
Anabilim Dalı Başkanı

Ek :
1- Dilekçe
2- Ders planları

Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Çağış Yerleşkesi 10145 Balıkesir Ayrıntılı bilgi için irtibat: Tarık Yavaş
Tel: 2662412762-537 Faks: 2666121307
E-Posta: sbe@balikesir.edu.tr Elektronik ağ: sbe.balikesir.edu.tr

YABANCI DİLLER EĞİTİMİ ANABİLİM DALI BAŞKANLIĞINA

Danışmanı olduğum 201712553003 numaralı Tezli Yüksek Lisans programı öğrencisi Gamze Yavaş Çelik'in tez çalışması için Balıkesir Üniversitesi Sağlık Fakültesi ve İktisadi ve İdari Bilimler Fakültesinde uygulama yapması için gerekli iznin verilmesini arzederim.

Yapılması planlanan çalışma aşağıdaki gibidir.

Uygulama kapsamında katılımcılara LLAMA dil yatkınlık testi, SILL strateji kullanımı testi ve Oxford Placement Test uygulanacaktır.

Eki: Ders planları

Danışman
06.03.2019
Dr.Öğr.Üyesi Fatih YAVUZ

2018 – 2019 Academic Year
Spring Term
Foreign Language II (English)
Course Content

Weekly Course Outline	*1st Week: Forming a profile page for themselves and their family* *2nd Week: Answering the questions about themselves and their families* *3rd Week: Talking about abilities/ likes and dislikes of themselves and family* *4th Week: Watching Alice in Wonderland animated story, talking about present and past events* *5th Week: Watching Alice in Wonderland animated story, talking about present and past events* *6th Week: Watching Alice in Wonderland animated story, asking and answering in past and present* *7th Week: Revision of the grammar patterns and vocabulary in videos, portfolio control* *8th Week: Midterm Exam* *9th Week: Midterm Exam* *10th Week: Watching Snow Queen animated story, using perfect forms* *11th Week: Watching Snow Queen animated story, using perfect forms* *12th Week: Watching Snow Queen animated story, using relative clauses* *13th Week: Watching Snow Queen animated story, using relative clauses* *14th Week: Revision of grammar patterns and vocabulary in videos, portfolio control*

2018 – 2019 Academic Year
Spring Term
Foreign Language II (English)
Course Content

Course Name	*Foreign Language II (English)*
Instructor	*Gamze Yavaş Çelik*
Time	*14 Week (28 Hours)*
The Aim of the Course	*The aim of this course is to help the students develop their language skills through reading, writing, speaking and watching videos. At the end of the course students will improve their vocabulary, understand basic level reading texts; write simple texts and be able to speak every day English. They will also have enough understanding on how to learn English.*
The Content of the Course	*This course is designed to improve university students' skills of reading, writing, listening and speaking effectively in their fields of study and in their academic activities. The aim of the course is to improve the students' communicative competence through creating interesting contexts, showing them authentic materials and authentic situations in and out of class and giving them assignments that lead to increase the usability of the language.*
Outputs of the Course	➘ *Introducing yourself, asking and answering questions (A1-A2)* ➘ *Describing someone and giving information about family members (A1-A2)* ➘ *Talking about abilities, possibilities, obligations, necessities and etc. (A1-A2)* ➘ *Describing events and experiences both in present and past (A1-A2)* ➘ *Telling the flow of events by using correct tenses (B1)* ➘ *Asking and answering in present, past and perfect and making dialogues (B1)*
Assessment	*Midterm: %40 test (reading comprehension, grammar and vocabulary)* *Final Exam: %60 (%30 test + %30 portfolio: introducing yourself and making dialogues)*
Materials	*Animated Fairy Tale Videos* *Story Books*

8.3.Appendix 3. Research Permission for the Faculty of Health Science

Evrak Tarih ve Sayısı: 25/03/2019-E.15109

T.C.
BALIKESİR ÜNİVERSİTESİ
Sağlık Bilimleri Fakültesi Dekanlığı

Sayı : 12743673 -300-
Konu : Öğrenci İşleri (Gamze Yavaş ÇELİK)

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 20/03/2019 tarihli ve 20381301/300/14359 sayılı yazı.

Enstitünüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi tezli yüksek lisans programı öğrencisi Gamze Yavaş ÇELİK'in "İngilizceyi Yabancı Dil Olarak Öğrenen Öğrencilerin (İYDOÖ) Dil Yatkınlık Testi, Standart Test ve Ders Başarılarının Sonuçlarına Yönelik Karşılaştırmalı Bir Çalışma" konulu yüksek lisans tezine yönelik veri toplamak amacı ile hazırlanan araştırmayı Fakültemizde yapması uygun bulunmuştur.

Bilgilerinizi ve gereğini arz ederim.

e-imzalıdır
Prof. Dr. Mehmet ÜNLÜ
Dekan V.

Sağlık Bilimleri Fakültesi Çağış Yerleşkesi 10145 Balıkesir
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8.4.Appendix 4. Semi-Structured Interview Questions

Participant's Name							
Pre-Test	***Post-Test***	***Mean Difference***	***LLAMA_B***	***LLAMA_D***	***LLAMA_E***	***LLAMA_F***	***Strategy Domain***

1) How do you interpret your test scores?
2) Do you want to learn English? Do you believe it's necessary?
3) Do you have anxiety about language learning? Do you feel tense during the lesson or in the exams?
4) Do you think that you can reflect the knowledge you have in the exams and the aptitude test?
5) Do you think that this 10-week training is different from the one you received before?
6) Do you like playing intelligence developer, thought-provoking puzzle style games? Do you play often?