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THE ANALYSIS OF LEARNING MODALITY OF MUSIC TEACHER CANDIDATES

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ABSTRACT

The researches on learning styles have put forward the necessity that during music education in different dimensions dominant learning style preferences should be used in learning process, their relationships with musical assignments and effectiveness. Besides, it is seen that teaching methods which make learning easier according to visual, auditory and kinesthetic learning qualities are suggested in musical learning. The purpose of this research is to determine learning modality of teacher candidates in Music Education Department and analyse them according to different variances. In this research, in which the relationship between learning modalities of music teacher candidates and their levels of gender, class, age, individual instrument and academic success is analysed, relational screening model has been used. 113 students who have been going on education in the Department of Music Education in Necmetin Erbakan University A.K.E.F. during 2014-2015 academic year comprise the sample of the research. The data which have been obtained in the research have been gathered via personal information form and BIG16 Learning Modalities Inventory, developed by Şimşek (2002). The inventory consists of 48 items and three learning modalities as visual, auditory and kinesthetic take part. In the result of the research, it has been concluded that more than the half of music teacher candidates (%60,2) mainly prefer using a mixed visual-auditory-kinesthetic modality. It has been determined that there is not any significant variation between gender, age, class, individual instrument, general academic average variances and their learning modalities.

Key Words: Music Education, Music Teacher Candidates, Learning Modalities.

INTRODUCTION

Teaching is explained in the most general sense as relatively marking behavioural changes which occur in the result of an individual's interaction with his environment (Senemoğlu, 2007:4; Özden, 2005:21) and the most fundamental elements of this process are student, teacher and curriculum. That learning process could carry out productively is directly linked to 'learner' s'; namely, the student's individual characteristics changing from one to one such as age, intelligence, gender, knowledge, talent, skill, past life (Babacan, 2010:12). Individual differences focus in five main groups as mental, physical, environmental, cultural and emotional (Küçükahmet, 2005:27-28) and they affect the individual's learning process besides it affects the individual's whole development process. Learning style concept in individual differences is defined as qualities which show the individual's tendencies and references towards learning. These qualities show how the individual perceives learning, interacts with his environment and reacts to the elements in his environment (Özer, 1998:151). According to Keef (1990:60), learning style concept is the combination of perceptual, affective and physiological qualities which are the signs of how the individual perceives, interacts with and reacts to his learning environment (Quoting: Güven,2004:14-15). According to Barba, Swassing and Milone (1979), even if there are a number of ways in defining learning style a common system states the perceptual and affective input of the knowledge as auditory, visual and kinaesthetic/tactile. While some individuals show only one modality personally, some could make transition between modalities easily or does not show a dominant modality. Perceptual learning styles/modalities/models are methods which lead knowledge obtained from environment during learning to be perceived, organised and processed and these perception ways are: seeing, hearing, tasting, smelling and touching (Quoting: Mishra, 2007:1). The researchers who have searched the

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importance of learning modality profiles point out that when complementary educational setting is provided learners prove by significantly high points and when they are taught by their most powerful visual, auditory and tactile learning modalities they prefer learning (Martini, 1986; Quoting: Tendy, 1998:16). The researches which have been done (Dunn, 1983, Dunn, 1984; Reinert, 1976) show that students have four basic perceptual learning channels (modalities). These are: visual learning (reading, studying on a diagram), auditory learning (lesson and sound recording), kinesthetic learning (experimental learning; that's, completely physically participating in a learning condition) and tactile learning (active/practical learning: carrying out building models, laboratory experiments) (Quoting: Reid, 1987:90). According to Molumby, the definition of three perceptual channels in learning styles is in this way (2004:52): While visual consciousness states how the student processes knowledge by reading written resources and seeing the others' samples in the classroom, auditory learners reacts relatively to oral statements and musical performances. Kinesthetic learners discover environment by some activities which they perform with their whole body such as playing an instrument, creative movements and dancing. According to Barbe and Swassing (1979:6), individuals may show some changes in their preferences for their own learning modality. Most people have a dominant modality. That's, it could be said to be a kind of channel in which knowledge could be processed in the most effective way; furthermore, with which a second modality could accompany. Other people; especially adults, may be deprived of dominant modality and have mixed modalities instead (Quoting:Tight, 2007:32). Since perceptual preferences (Şimşek, 2001:36) are related to settings, materials which students prefer using during learning and encoding format of the message used, the whole of these preferences are called learning modality.

During music education the relationship of learning modality with music has been analysed in numerous ways. Researchers have accepted the effects of learning modality in rhythmic perception, the effects of kinesthetic empowerment/support and the effects of modality-based teaching. However, in only few of these studies tests to assess standardised learning modality power/durability or preferences are available (Sanders, 1991:18). According to Kinslow (1995:15-17), although music is a language it is not an oral language. While the language created and spoken uses words, music uses tonal and rhythmic models. Perception is our talent to comprehend mentally and recognise by the help of senses. Musical perception is linked to music; on the other hand, it is a complicated activity which involves analysing, thinking about, evaluating and feeling music besides listening to it. Auditory perception is a part of the whole musical activity; however, it is not same with any other activity.

Auditory memory is a kind of inner perception which involves sound volume, melody, harmony, rhythm, dynamics, tempo and other elements in music (Rickey, 2004:18). According to Mishra (2007:2) auditory memory is the capability to be able to hear notes of a musical composition with correct order but without any sound resource or a notational clue. Even to be able to remember a composition which has been played before correctly or wrongly is a skill depending on auditory memory. Auditory memory provides us with hearing what is going to come next in music and directing what is heard to fingers (Newman, 1974). According to Rubinstein (1950:51), music is sound and ear is just a medium in which music is possible to be perceived. Therefore, auditory memory controls the functions of the others and training on memorising by ear is the one which could be analysed, controlled and even trusted best. Gordon (1995) defines auditory memory as "before reality" or inner perception. He believes that auditory memory triggers the whole musical performance. In other words, ear helps thought be conceptualised before playing music. Besides, ear provides continuity and helps people who play by ear and without note (Quoting: Rickey, 2004:18).

Visual memory is the capability to be able to remember the note appearance of a music composition on the paper and visualise positions of finger movements or positions of the hand on the instrument in mind. Visual memory could also be considered as 'photographic memory'. Still, what is actually asked in the usage of visual memory is not the exact mental photography of the entire notation (Mishra, 2007:2). Lo (1976) emphasises it is important to comprehend almost everything wholly related to notation because it might be a futile/unnecessary effort to try to memorise something which is not understood. Rubinstein (1950:52) defines visual memory as "*a medium which converts notes into sound and makes it exist physically on the manual* ". Visual learning is not only the impression remaining from the visible but it is that those in papers are perceived. According to Newman (1974), visual learning is significant but it shows variations depending on to what extent

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it are used in practice. Somebody can remember music nearly exactly; however, the other approaches (auditory, kinesthetic) have no persistence and memory is untrustful. Motor, auditory and analytical approaches should be a part of the visual (Quoting: Rickey, 2004:19).

Kinesthetic memory is the capability to keep muscular movements which are needed in conditions such as a musical performance in mind (Mishra, 2007:2). According to Shockley (1980), the kinesthetic form of memory is also known as tactile, motor, finger and sometimes muscle memory. It states not only feeling the manual under fingers but also the distance involving up-down (right-left) movement on the manual. Kinesthetic memory is developing/forming habit depending on the coordination of muscles and repeating (Bryant, 1999). It is a habit developing automatically through playing by memory continuously (Newman, 1974) or a habit rooted in the automatic reflex in fingers, wrists and arms (Sterba, 2000). Most pedagogues agree that finger memorisation should be practiced much carefully so as to take memory into the most powerful and trustful condition while practising an instrument. When it is practiced by the same finger coordination with a certain clarity motor memory becomes more durable (Quoting: Rickey, 2004:19).

Different learning styles/models and researches in which these are analysed in terms of different variances are available (Kinslow, 1995; Hagans 2004; Stuber, 1997). It is seen that there are researches on defining the range of learning models/styles/modality in music education about perceptional dimension and generally dominant learning modality at home and abroad, searching modality in musical works and matching teaching strategies with dominant learning styles (Sanders, 1991; Mishra, 2007; Bauer, 1994; Molumby, 2004; Lammers, 2006; Rickey, 2004; Ömür, 2003; Babacan, 2010). When the range of perceptional dimension in these researches are analysed (see also.table-1) it is seen that a dominant modality does not generally occur. Since music is primarily perceived by the means of hearing many researchers have tested the hypothesis that talented musicians are auditory or auditory learners could be better musicians but both hypotheses have not been supported in literature (Mishra, 2007:5).

Table 1: The Range of Learning Modality in Researches on Music

Researcher	Year	Auditory	Visual	Kinesthetic	(Mixed)
Dobbs	1989	24	**28**	14	34
Dunn	1994	19	**50**	6	25
Falkner	1994	22	29	**50**	-
Gates	1993	**33**	11	13	43
Gates	1993 (pilot)	4	**40**	34	33
Hughes	1990	26	**39**	35	-
Kreitner	1981 (SBMI)	14	**24**	7	55
Kreitner	1981 (LSI)	12	-	**31**	58
Pautz	1989	18	**33**	18	31
Persellin	1988	27	**43**	12	18
Persellin & Pierce	1988	42	**50**	8	-
Sanders	1996	34	**50**	3	13

SBMI = Swassing-Barbe Modality Index, LSI = Learning Styles Inventory

(Quoting:Mishra, 2007:5)

In his research in which he examined the relationship between musicians' learning modality and musical memorising strategies they preferred, Mishra (2007) concluded that there is a weak relationship between learning styles and memorising style preferences; furthermore, only a part of visual learners (%34) prefer visual memorising strategy. Molumby (2004) used various teaching strategies so that flute students comprehend their potential to understand their own individual learning styles and stated all respondents had positive reactions. In his research, Rickey (2004) observed his 17 students' learning style profiles and learning approaches which they used in memorisation with pretest-posttest interview questions in video record; then, stated that the most common ways pianists used in memorisation were visual, auditory, tactile and analytical

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approaches and students were tended to visual and tactile approaches in memorisation, %88 (15) of them preferred visual and tactile memorising approach.

In this research, it is aimed to analyse the range of learning modalities of teacher candidates in Music Education Department and the relationship between learning modality and different variances. Responses to the questions below have been searched for this aim:
Which learning modality do students prefer rather?
Does students' learning modality differentiate according to gender?
Does students' learning modality differentiate according to age?
Does students' learning modality differentiate according to class?
Does students' learning modality differentiate according to grade point average in individual instrument?
Does students' learning modality differentiate according to general academic average?

METHOD

Research Model and Study Group

In the research screening model has been used. Screening model has been used as it is aimed to analyse the relationship between learning modality of teacher candidates in Music Education Department and their gender, class, age, individual instrument and academic achievement GPA (grand point average). 113 students who have been continuing their education in Music Education Department of Necmettin Erbakan University A.K.E.F. consist the sample of the research. Students' demographic qualities on gender, class, age have been presented in table-2 and the range of their individual instrument and GPA has been presented in table-3.

Table 2: The Range of Demographic Qualities of Responsive Students in the Research

Variance	Subcategory	f	%	Total
Age	18-20	53	46,9	113-%100
	21-23	51	45,1	
	24 and over	9	8,0	
Gender	Male	40	35,4	113-%100
	Female	73	64,6	
Class	1	28	24,8	113-%100
	2	37	32,7	
	3	36	23,0	
	4	22	19,5	

Table 3: The Range of Individual Instrument and Academic GPA of Students

Variance	Subcategory	f	%	Total
Individual Instrument GPA	0-20	2	1,8	113-%100
	21-40	1	0,9	
	41-60	6	5,3	
	61-80	42	37,2	
	81-100	62	54,9	
Academic GPA	0-49 / F-FD	1	0,9	113-%100
	50-59 / DD-DC	15	13,3	
	60-84 / CC-CB	72	63,7	
	85-100 / BB-AA	25	22,1	

Data Collection Tool

Data obtained in the research have been collected by personal information and "BIG16 Learning Modality Inventory" developed by Şimşek (2002). The inventory is consisted of 48 items and three learning modalities as visual, auditory and kinesthetic take part in it. In the analysis done for BIG16 inventory, Kaiser-Meyer-Olkin

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(KMO) value has been determined as 0.722. CronBach-Alpha reliability value in the whole inventory has been accounted as .844. Subdimensions have been accounted as visual dimension .793, auditory .771, kinesthetic dimension .684 and the assessment tool has been determined to be reliable. Each three dimensions of the scale are consisted of 16 items. Grading in the assessment instrument is in this way: "Strongly agree= 2", "Agree= 1", "Hesitant= 0", "Disagree= -1", "Strongly disagree= -2". The range of the items in the inventory according to dimensions is in this way:
Visual modality: 2, 4, 6, 12, 14, 20, 25, 28, 30, 35, 36, 37, 40, 43, 46, 48
Auditory modality: 1, 3, 8, 9, 13, 17, 21, 22, 26, 29, 31, 33, 39, 42, 44, 47
Kinesthetic modality: 5, 7, 10, 11, 15, 16, 18, 19, 23, 24, 27, 32, 34, 38, 41, 45

This inventory developed is a tool which could be used in determining learning modalities of students at the age between 16-25 (Şimşek, 2002).

The Analysis of Data

In the analysis of data of the learning modality inventory, total points of each dimension has been written in the column (values between -32 and 32) primarily by using Excel. According to the directions in the inventory, estimates of grading have been evaluated as the dimension in -32 and -8 points range "reactive to learning modality", values in -7 and 7 points range "not regarded" and values in 8 and 32 points range "holding learning modality" (Bilasa, 2012:15; Bölükbaş, 2007:54). Accordingly, the highest point in positive (+) values represents first degree dominant learning modality, secondly high degree represents secondary dominant modality and the lowest value represents tertiary modality. In case very close points to each other are resulted it has been interpreted that the student holds more than one learning modality. In the research students (n: 11) who are reactive to all three modalities and were not able to get enough point from any modality have been extracted from the research sample. In the result of the students' points of positive values on the evaluation in the inventory range of learning modality has been presented in table-4. In this research, students' dominant visual, auditory and kinesthetic dimension points have been used (table-5). In the analysis of data an evaluation has been made by using SPSS-18 statistics programme and in the analysis percentage and frequency has been used and in the analysis of relationships between variances chi square test has been used. In statistical estimates significance level has been supposed 0.05.

FINDINGS

In this part, the ranges of teacher candidates' learning modality and the relationship of gender, age, class level, individual instrument and academic GPA with learning modality have been analysed.

Table 4: The Range of Students According to Their Learning Modalities

Learning Modality	f	%
Visual	17	15,0
Auditory	9	8,0
Kinesthetic	1	0,9
Visual-Auditory	11	9,7
Visual-Auditory-Kinesthetic	68	60,2
Kinesthetic-Auditory	5	4,4
Visual-Kinesthetic	2	1,8
Total	113	100

According to the range in table-4, from the highest percentage %60,2 of the teacher candidates educated in music uses visual-auditory-kinesthetic modality, %17 uses visual modality and %11 visual-auditory modality. According to this result, more than half of the candidates use all three modalities and although general range is mostly visual modality it shows mixed modalities are preferred rather.

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Table 5: The Range of Students According to Their Dominant Learning Modality

Learning Modality	f	%
Visual	62	54,9
Auditory	40	35,4
Kinesthetic	11	9,7
Total	113	100

According to table-5, %54,9 of music teacher candidates use visual, %35,4 use auditory and %9,7 use kinesthetic learning modality. Accordingly, it could be said that more than half of the candidates prefer visual learning and visual learning modality is preferred rather than the other modalities.

Table 6: Chi Square Test Results on the Analysis of Learning Modality According to Gender

Gender		Learning Modalities				χ^2
		Visual	Auditory	Kinesthetic	Total	
Male	n	23	13	4	40	χ^2=0,230 sd=2 P=0,892
	%	57,5	32,5	10,0	100	
Female	n	39	27	7	73	
	%	53,4	37,0	9,6	100	
Total	n	62	40	11	113	
	%	54,9	35,4	9,7	100	

When table-6 has been analysed, it has been determined that there is no significant variation between teacher candidates' learning modality and gender (p=0,892). Both male and female candidates prefer visual learning modality rather.

Table 7: Chi Square Test Results on the Analysis of Learning Modality According to Age

Age		Learning Modality				χ^2
		Visual	Auditory	Kinesthetic	Total	
18-20	n	32	17	4	53	χ^2=3,402 sd=4 p=0,493
	%	60,4	32,1	7,5	100	
21-23	n	25	21	5	51	
	%	49,0	41,2	9,8	100	
24 and over	n	5	2	2	9	
	%	55,6	22,2	22,2	100	
Total	n	62	40	11	113	
	%	54,9	35,4	9,7	100	

When table-7 has been analysed, it has been seen that there is no significant variation between teacher candidates' learning modality and age groups (p=0,493). When percentiles in all three groups have been analysed, it has been determined that the candidates prefer visual learning modality relatively.

Table 8: Chi Square Test Results on the Analysis of Learning Modality According to Class Level

Class		Learning Modality				χ^2
		Visual	Auditory	Kinesthetic	Total	
1st	n	17	9	2	28	χ^2=3,558 sd=6 p=0,736
	%	60,7	32,1	7,1	100	
2nd	n	19	14	4	37	
	%	51,4	37,8	10,8	100	
3rd	n	17	7	2	26	

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	%	65,4	26,9	7,7	100	
4th	n	9	10	3	22	
	%	40,9	45,5	13,6	100	
Total	n	62	40	11	113	
	%	54,9	35,4	9,7	100	

According to table-8 it has been discovered that there is no significant variation between teacher candidates' learning modality and class level (p=0,736). When percentiles according to class level have been analysed, it has been determined that 1st, 2nd and 3rd class students prefer visual learning modality whereas 4th class students prefer auditory learning modality rather.

Table 9: Chi Square Test Results on Learning Modality According to Individual Instrument GPA

Individual Instrument GPA		**Learning Modality**				**χ^2**
		Visual	**Auditory**	**Kinesthetic**	**Total**	
0-20	n	-	2	-	2	χ^2=24,317[a] sd=8 p=0,002
	%	-	100	-	100	
21-40	n	-	-	1	1	
	%	-	-	100	100	
41-60	n	5	-	1	6	
	%	83,3	-	16,7	100	
61-80	n	18	22	2	42	
	%	42,9	52,4	4,8	100	
81-100	n	39	16	7	62	
	%	62,9	25,8	11,3	100	
Total	n	62	40	11	113	
	%	54,9	35,4	9,7	100	

a. 10 cells (66,7%) have expected count less than 5. The minimum expected count is ,10.

When table-9 has been analysed, it has been determined that there is a significant variation between teacher candidates' learning modality and individual instrument GPA (p=0,002). It is not decent to interpret results of significance test because in this analysis the expected value of pore numbers lower than 5 exceeds %20 of total pore number (%66,7) (Büyüköztürk, 2014:163). For this reason, unification has been applied into grade point averages.

Table 10: Chi Square Test Results on the Analysis of Learning Modality According to Individual Instrument Unified GPA

		Learning Modality				**χ^2**
		Visual	**Auditory**	**Kinesthetic**	**Total**	
0-80	n	23	24	4	51	χ^2=5,529 sd=2 P=0,063
	%	45,1	47,1	7,8	100	
81-100	n	39	16	7	62	
	%	62,9	25,8	11,3	100	
Total	n	62	40	11	113	
	%	100	100	100	100	

a. 1 cells (16,7 %) have expected count less than 5. The minimum expected count is 4,96.

When table-10 has been analysed it is seen that there is no significant variation between teacher candidates' learning modality and individual instrument GPA (p=0,063). When percentiles in groups have been analysed it has been determined that the candidates with GPA in rank 81-100 points prefer visual learning modality while

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the others with GPA in rank 0-80 prefer visual-auditory learning modality. According to these results, it could be said the candidates who use visual learning modality have higher GPA.

Table 11: Chi Square Test Results on the Analysis of Learning Modality According to General Academic Average

Class		Learning Modality				χ^2
		Visual	Auditory	Kinesthetic	Total	
0-49	n	-	1	-	1	χ^2=3,349 sd=6 p=0,764
	%	-	100	-	100	
50-59	n	9	5	1	15	
	%	60,0	33,3	6,7	100	
60-84	n	40	26	6	72	
	%	55,6	36,1	8,3	100	
85-100	n	13	8	4	25	
	%	52,0	32,0	16,0	100	
Total	n	62	40	11	113	
	%	54,9	35,4	9,7	100	

According to table-11, it is seen that there is no significant variation between teacher candidates' learning modality and general academic average (p=0,764). According to general academic average, when percentiles have been analysed it has been determined that students with 50-59, 60-84 and 85-100 GPAs prefer visual learning modality.

DISCUSSION AND CONCLUSIONS

In this research in which the relationship between the range of learning modality of teacher candidates educated in music and their learning modalities and different variances, %54,9 of the students prefer visual, %35,4 prefer auditory and %9,7 prefer kinesthetic learning modality rather. Moreover, it has been evident that %60,2 of students have visual-auditory-kinesthetic mixed modality rather. According to this result, more than the half of the candidates use all three learning modalities and general range shows that while visual modality is main mixed modalities are preferred rather. In a similar way, Yağısan and Sümbül (2009) determined that students in music department actively used all learning modalities particularly auditory and kinesthetic learning modality. While in body of literature it is seen that visual learning modality is predominant in different branches (Çağlayan and Şirin, 2009; Çağlayan and Taşğın, 2008; Bilasa, 2012), results of the researches in the field of music become distinct. In the results of the research for learning modality in music education (See also table 1), it is seen that mixed modality rather than dominant modality has occurred predominantly or dominant learning modality shows variety. For instance; Falkner (1994) found that third class students with high music talent were primarily visual and kinesthetic students rather than auditory. Similarly, Kreitner (1981) brought into open that although choir students with music talent at secondary school show auditory learning preference faintly, they are predominantly kinesthetic and visual learning students (Quoting: Mishra, 2007:4). Apfelstadt (1986) concluded in his research, in which he examined the relationship between 65 second class students' learning modality (visual auditory, kinesthetic and mixed type) and their vocal intonation, primarily visual learning students and then respectively mixed, kinesthetic and auditory learning students became the most clear (intoning withn the right frequency) singers. Besides, he stated that those whose auditory side was powerful forgot the sound after a while; on the other hand, visual learners remembered and reproduced sounds by producing forms visually. In a similar way, Zikmund (1988) determined that visual learning students who are reinforced visually learned melodies and rhythms better than visual learning students who are not reinforced visually. In the same way, it was seen that tactile/kinesthetic learning students got higher points when they were reinforced tactually/kinesthetically (Quoting: Bauer, 1994:37). As a matter of fact, Mishra (2007:5) states most researchers tested the hypothesis that talented musicians were auditory or auditory learners could be better musicians; however, both hypotheses were not supported in literature.

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A significant variation in learning modality of teacher candidates educated in music according to their gender, age and class levels (table-5-6-7). According to the results, both male and female students prefer visual learning modality relatively to other modalities. In parallel with this research, some other research in which learning modality does not vary according to gender are available (Yağışan ve Sümbül, 2009; Çağlayan ve Taşğın, 2008; Bölükbaş, 2007). Similarly, when percentiles in age groups have been analysed, music teacher candidates prefer visual learning modality rather. In parallel with the research, in the result of the research by Çağlayan and Taşğın (2008) it was observed that age variance did not create a variation in learning modality but in parallel with getting older (25 and over) the rates at student candidates' having visual, kinesthetic and auditory learning modalities show a closer range among each other. According to class level 1st, 2nd and 3rd class students prefer visual modality while 4th class students prefer auditory learning modality. Unlike this, Yağışan and Sümbül (2009) determined that age variance creates variation in learning styles and 2nd class students in Music Department prefer visual style relatively to 3rd class students; on the other hand, auditory style is preferred by 1st class students rather. Moreover, Reid (1987), who searched for individuals' learning modality preferences and qualities in the learning process of the second language, English, concluded that learning styles of students who have various foundations on language were varied and factors such as gender, age, study period, study field (department), TOEFL point influenced learning modality.

It has been determined that there is not a significant variation between music teacher candidates' learning modalities and general academic averages (table-8-9-10). Still, it has arisen that students with high grade points (between 81-100) prefer visual learning modality (%62,9) rather. Researches for the positive effectiveness of learning styles on academic success at different fields in education are available (Özbek, 2006; Bolat, 2007; Babadoğan 2002; Veznedaroğlu and Özgür 2005; Önder 2006; Ömür 2003; Rickey 2004). In the research on the learning methods of the learning modality of students whose native language is English Witkin, Moore, Oltman and their colleagues (1997) concluded that students who had changed their department during their academic career turned towards departments suitable for their own cognitive methods. In parallel with this view, Grasha (1984) stated some researches concluded people with certain learning styles prefer different content areas according to learning style qualities (Quoting: Reid, 1987:94–95). In music area, rather than the researches which analyse only the relationship between learning modality and academic achievement, studies on using learning modality at teaching activities and the effect of the relationship between various teaching materials and methods and learning modality on academic achievement have been encountered. For instance; Bauer (1994) determined students' individual learning styles could be shaped in order to get a better academic achievement opportunity in the result of his research with 90 persons in the course 'Understanding Music' on whether any learning style quality had any significant contribution to general model variety in teaching by CD-ROM and general model variety in explanatory teaching type. In his research, in which he analysed 17 voluntary piano students' learning style profiles and learning approaches they used in memorising, Rickey (2004) put forward the most common ways which pianists used in memorising were visual, auditory, tactile and analytical approaches and %8 of them (15) preferred visual and tactile memorising approach . Babacan (2010) stated that teaching activities which are done in learning modality dimension had a positive effect on a student's achievement and attitude in piano training. By the consequence that piano training which is practiced through a unique teaching model and in a monotonous way does not improve students' performances, Ömür (2003) suggests that piano training should be practiced thorough the view that students have different learning systems and strategies.

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