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The Examination of Learning Strategies of Vocational College Students Concerning Various Variables

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ABSTRACT

Purpose: This study aims to examine the learning strategies of university students concerning various variables.

Method: The population of this study, which was a quantitative research method, included students studying at Sarikamis Vocational College of Kafkas University in the fall semester of 2018-2019 academic year. The sample of this study consisted of 341 students selected by a simple random sampling method. As data collection tools, "Personal Information Form" and "Learning Strategies Determination Scale" (LSDS) developed by Guven (2004) were used. As a result of the analyzes conducted to determine whether normality assumptions were met, the data were distributed normally and provided the necessary conditions for parametric tests. Thus, independent samples t-test and one-way analysis of variance (ANOVA) were used for data analysis.

Findings: In this study, the answers of the students to the Learning Strategies Determination Scale (LSDS) were evaluated, and it was determined that the learning strategy that students had the most (high level) was the rehearsal strategy and the least (middle level) was the organizational strategy**.**

Implications for Research and Practice: As a result of this research, statistically significant differences were found between the students' learning strategies and their gender, forms of level (daytime teaching/evening education), departments and high school achievement scores, and no statistically significant differences were found between the educational strategies of the students and the educational level of parents. Various suggestions have been developed in line with the results of this research.

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Introduction

In addition to the necessity of a sufficient level of field knowledge and field teaching knowledge to provide a quality teaching service to the students; it is also significant for students to be aware of learning, thinking, remembering, structuring information and motivating themselves (Hamurcu, 2002; Guven, 2004; Demirel, 2012; Alfian, 2016). According to Ormrod (1990) and Schunk (2014), learning, which can be expressed as continuous changes in behaviors or mental processes depending on human life, should be planned, directed, monitored, controlled and evaluated to reach the goals (Cirpan, Gurer, Gayef & Kaplan, 2017). This way of organizing learning is a strategy business. The concept of strategy is expressed as a way to achieve a predetermined goal (Turkish Language Society, 2005). The learning strategy, on the other hand, is the acquisition of information by the students while they are learning, adding to the memory and using the information when needed (Weinstein & Mayer, 1986; Guven, 2004). According to Ozer (2001), learning strategy is a method that facilitates individual self-learning, while for Demirel (2005), it is the mental tactics used by an individual in a special learning situation to facilitate the acquisition of knowledge and skills. On the other hand, to Arends (1997) and Guven (2004), the learning strategy and the activities carried out by the learners in the learning process are sorted as identifying learning, following the chosen strategy, working with high motivation until learning is completed and choosing the appropriate learning strategy. The main purpose of the learning strategy is to influence student's affective state and to enable him/her to receive, organize and structure the new knowledge with the previous one (Harmanli, 2000; Kistner, Rakoczy, Otto, Klieme & Buttner, 2015). The successful learning of an individual depends on his/her knowledge and skills in learning strategies. Therefore, teaching learning strategies to learners can contribute to learning (Gagne & Glasser, 1987; Senemoglu, 1998; Tasdemir & Tay, 2007; Babali, 2010). In other words, one of the most effective ways to increase the success level of learners and ensure their lifelong development is to learn their learning strategies (Acikgoz, 1998; Kocak, 2010; Shi, 2017). Thus, learners can contribute to their personal and professional development by directing their own learning.

There are different classifications about learning strategies (Saribas, 2009). According to Levin (1988), learning strategies are divided into three groups as comprehension strategies, recall strategies and application strategies. Gagne (1988), on the other hand, evaluated learning strategies in five groups as attention strategy, short-term memory storage enhancement strategy, coding strengthening strategy, facilitating recovery strategy, monitoring and managing strategy. According to Ozturk (1995), learning strategies are attention, rehearsal, elaboration, placement in mind, remembering, managing cognition and affective strategies. Learning strategies, which were put forward by Weinstein and Mayer in 1986 and later organized by Demirel (1993), Ozer (1998) and Guven (2004), can be classified as rehearsal strategies, elaboration strategies, organizing strategies, monitoring comprehension strategies and affective strategies. The classification of learning strategies to be used in this study designed by Weinstein and Mayer (1986), Demirel (1993), Ozer (1998) and Guven (2004) is rehearsal, elaboration, organization, monitoring comprehension and affective

strategies. The main reason for using this classification is that the learners can present their learning strategies in a simple way without causing confusion. A brief description of the learning strategies used in this research was found appropriate:

Rehearsal strategy: The basis of this strategy is mental repetition. It can be used in basic learning (Simsek & Balaban, 2010). The rehearsal strategy has two contributions to the learner: selection and acquisition. Selection is to ensure that learners can select the significant parts, while acquisition is the ability of learners to achieve gains with repetitions (Ozer, 1998; Erdem, 2005; Glogger, Schwonke, Holzapfel, Nuckles & Ankel, 2012).

Elaboration strategy: Means obtaining new information fused with the old information as a whole (Hamilton, 1989; Ozturk, 1995; Erden & Akman, 1998). Implicit and explicit repetition, coding, organizing, insertion and memory support techniques can be used in elaboration strategies (Tay &Yangin, 2008).

Organizational strategy: A strategy aiming to learn by rearranging information. Organizational strategy is used together with the elaboration strategy (Erdem, 2005). In this strategy, an individual can group new information. The individual can make new meaning and meaning for himself by restructuring new information and material (Subasi, 2000).

Strategy for monitoring comprehension: Is learner's determination of learning goals, evaluation of these goals and, if necessary, change the way of learning (Weinstein & Mayer, 1986). Comprehension monitoring strategies can be organized into three stages. These are to prepare to understand, to monitor comprehension and to direct comprehension (Somuncuoglu, 1998).

Affective strategies: This strategy emphasizes emotion control in the individual's learning process. It is a strategy that helps control negative emotions that may occur during learning and may affect learning negatively (Sonmez, 2007; Demirel, 2012). Intensifying attention, developing positive perception, increasing motivation and coping with stress are affective strategies (Ozer, 1998). There are many studies on learning strategies in the literature. Table 1 shows the current, significant and relevant research topics.

Table 1

Related Research

Date	Author Name	Article Name	Findings and Conclusion
2018	Yaacob, A., Shapii, A., Saad, A., Al-Rahmi, W. & Alias, N.	Vocabulary learning strategies (VLSS) through secondary students at Saudi School in Malaysia (SSM): A pilot study.	The learning strategies of the learners differ.
2017	Cırpan, K. F., Gurer, A. Gayef, A. & Kaplan, E.	Learning strategies of anesthesia students at the vocational school of health services.	Among the learning strategies they have, the most commonly used strategies are elaboration and affective strategies. Significant differences were found between students' forms of level and learning strategies.
2017	Shi, H.	Learning strategies and classification in education.	As students use appropriate learning strategies, learning-oriented confidence, motivation and achievement increase.
2016	Alfian, A.	The application of language learning strategies of high school students in Indonesia.	Significant differences were found between the gender and achievement of the students and their learning strategies.
2015	Kistner, S., Rakoczy, K., Otto, B., Klieme, E. & Buttner, G.	Teaching learning strategies: The role of instructional context and teacher beliefs.	Learners' learning strategies differ due to their beliefs and expectations.
2012	Demirel, M.	Language learning strategies used by university students	A significant difference was found in using learning strategies according to gender. As the level of using learning strategies increased, academic achievement level increased.
2012	Glogger, I., Schwonke, R., Holzapfel, L., Nuckles, M. & Ankel, A.	Learning strategies assessed by journal writing: Predicting learning outcomes by quantity, quality and combinations of learning strategies.	The students who participated in the research were generally more successful in a learning strategy. In learning strategies, learners should identify learning strategies with a more innovative approach.
2010	Babali, O.	Comparative analysis of the learning strategies and styles of girls in vocational high schools and general high schools.	Significant differences were found between students' learning strategies and their departments and genders.

Table 1 Continue

Date	Author Name	Article Name	Findings and Conclusion
2010	Kocak, S.	The effects of active learning method on students' success in information technology course and learning strategies.	Significant differences were found between the students' learning strategies and demographic variables.
2010	Simsek, A. & Balaban, J.	Learning strategies of successful and unsuccessful university students.	Students' correct determination and use of their learning strategies can contribute to their academic success.
2008	Tay, B. & Yangin B.	Learning strategies used by 4th-grade students in social studies class in the classroom environment.	The learning strategies of the students vary. Students can often use attention, rehearsal and motivation strategies.
2005	Erdem, A. R.	Effective ways of learning: learning strategies and teaching	It is emphasized that learning strategies should be given importance to students starting from daytime teaching.
2004	Guven, M.	Relationship between learning styles and learning strategies.	Learning strategies that students often use are elaboration and monitoring comprehension strategies. Students'learning strategies differ according to their gender and the department they study.
2002	Hamurcu, H.	Preschool teacher candidates' learning strategies.	The learning strategies used by preschool teacher candidates vary according to the class and age they are studying.
1995	Ozturk, B.	Use of general learning strategies by students.	Significant differences were found in the educational level of parents and the learning strategies of the students. Also, the students'learning strategies differ according to high school achievement status.

As shown in Table 1, according to Tay and Yangin (2008), Glogger et al. (2012), Kistner et al. (2015) and Yaacob et al. (2018), learning strategies of learners differ due to learners' interest, skills, expectations, and beliefs. For Cirpan et al. (2017), there are differences between students' forms of level and learning strategies. According to Shi (2017), as students use appropriate learning strategies, there is an increase in their learning-oriented confidence, motivation and achievement. In the studies conducted by Guven (2004), Babali (2010), Kocak (2010), Demirel (2012) and Alfian (2016), it is seen that there are differences between students' gender and learning strategies. According to Simsek and Balaban (2010) and Demirel (2012), academic achievement levels increased as the level/quality of learning strategies increased. According to

Hamurcu (2002), Guven (2004) and Babali (2010), there was a difference between the departments where the students study and their learning strategies. Erdem's (2005) research emphasizes the importance of learning strategies of students starting from daytime teaching. Ozturk's (1995) study showed significant differences between the educational level of parents of the learners and the learning strategies used. In addition, students' learning strategies differ according to their high school success. In the current information age, it is significant not to obtain the information as it is; but it is important to learn how to access change/use information. As American educator John Dewey put it, "Learning to think is teaching to learn (Bagceci, 2017). Therefore, priority should be given to students' learning to learn. In the literature, it is frequently emphasized that teachers should be interested in their students' learning strategies and raise awareness about this issue (Hartman, 1995; Pritchard, 2009). In order for students to learn how to learn, first of all, they need to know which learning strategy they have. With this research, it is aimed to determine the learning strategies of vocational college students. When the related studies are evaluated, in this research, it was found appropriate to determine statistically significant differences between learning strategies and gender, departments, forms of level, the educational level of parents and high school achievement scores of vocational college students. In this way, the academicians working in the vocational school can contribute to getting to know their students better; and this situation is essential in terms of causing positive changes in the learning processes of vocational college students.

The present study aims to investigate whether the learning strategies of the students of Sarikamis Vocational Collegeen rolled in the 2018-2019 academic year at Kafkas University for the fall term differ concerning variables like gender, department, forms of the educational level of parents and high school achievement score. Thus, the research problem has been determined as "What are the learning strategies of vocational college students? In addition to this research problem, the other sub-problems that are intended to be answered are:

Is there a statistically significant difference between the learning strategies of vocational college students and;

- their gender, departments, forms of levels,
- their mothers' educational level, and their fathers' educational levels,
- their high school achievement scores?

Method

Research Design

In this study, where the quantitative method was preferred, the survey method was used. Quantitative research can also be mentioned as a hypothesis testing or problem-solving process (Creswell, 2012; McMillan & Schumacher, 2014; He, 2017). The survey method is based on collecting data on the subject that is desired to be obtained about a population (Mills Gay & Airasian, 2012; Buyukozturk, Cakmak, Akgun, Karadeniz & Demirel, 2017). In this study, the survey method that is one of the

quantitative research methods was used to determine the learning strategies of vocational college students and to investigate these strategies by collecting data concerning various variables.

Research Sample

The population of this study consisted of the students of Kafkas University, Sarikamis Vocational College, in 2018-2019 academic year. In a study, sampling methods can be used because reaching the entire population is not economical and requires a long time and effort (Arli & Nazik, 2001). Although there are various sampling methods (Bustami, Corabime & Suarsini, 2017) because random sampling methods can better represent the population (Cristensen, Johnson & Turner, 2015; Buyukozturk et al. 2017), this study uses simple a random sampling method. The population and sample of this study are shown in Table 2.

Table 2

Population and Sample

CLASS / DEPARTMENT	1st Grades		2nd Grades		GRAND TOTAL
	Daytime	Evening	Daytime	Evening	
Logistics	44	---	37	---	81
Private Security and Protection	33	13	17	24	87
Early Childhood	66	66	54	53	239
Public Affairs	12	---	37	---	49
Occupational Health and Safety	45	---	28	---	73
Others"Closed Departments" (Tourism Animation, Tour. Hotel Man., Tour. Guid.).	---	32	---	---	32
Class Total	200	111	173	77	**561**
Grand Total (Population)	**311**		**250**		
Sample Size (Minimum)	**228**				
Sample Reached	**341**				

Accordingly, the number of vocational college students constituting the research population was 561. The sample size calculated using scientific methods (Krejcie & Morgan, 1970; Yazicioglu & Erdogan, 2004) should be at least 228 people. In this study, the researcher reached 341 people. Table 3 shows the distribution of the students participating in this research according to their gender, departments, forms of level, the educational level of parents and high school achievement level.

Attributes of Participants

Variable		n	%
Gender	Male	146	42,8
	Female	195	57,2
Forms of Level	Daytime Teaching	235	68,9
	Evening Education	106	31,1
Department	Early Childhood	146	42,8
	Private Security and Protection	51	15,0
	Public Affairs	44	12,9
	Occupational Health and Safety	43	12,6
	Logistics	57	16,7
Mother Education Levels	Not Attended School	101	29,6
	Elementary School Graduates	157	46,0
	Secondary School Graduates	51	15,0
	High School Graduates	32	9,4
Father Education Levels	Not Attended School	31	9,1
	Elementary School Graduates	123	36,1
	Secondary School Graduates	86	25,2
	High School Graduates	101	29,6
High School Achievement Score	51 - 60 Point	49	14,4
	61 – 70 Point	139	40,8
	71 – 80 Point	122	35,8
	81 – 90 Point	31	9,0

Research Instrument and Procedures

The data collection tool used in this research consisted of two parts. The first part included the "Personal Information Form (PIF)", and the second part included the "Learning Strategies Determination Scale (LSDS)". The PIF collects data on the variables of gender, department, forms of level, the educational level of parents and high school achievement level. The LSDS was developed by Guven (2004) and the necessary permissions were obtained from Guven to be used in this research. The subscales and the items of the sub-dimensions of LSDS are shown in Table 4.

Table 4

The Item Distribution of Learning Strategies Determination Scale (LSDS)

Learning Strategies	Item Numbers
Rehearsal Strategies	1, 10, 13, 20, 27, 36
Elaboration Strategies	2, 4, 9, 11, 15, 19, 24, 26, 28, 31, 35
Organizational Strategies	3, 6, 12, 18, 23, 32, 39
Strategies for Monitoring Comprehension	7, 14, 17, 21, 22, 25, 29, 33, 37
Affective Strategies	5, 8, 16, 30, 34, 38

The LSDS has a five-point Likert-scale assessment. Scores and meanings used in the five-point Likert-scale assessment are; point 1 is "Not at all suitable for me", point 2 is "Not suitable for me ", point 3 is "Slightly suitable for me", point 4 is "Quite suitable for me ", point 5 is "Totally suitable for me" (Erkus, 2016). Table 5 shows the score ranges and the values for the items in the data collection tool.

Table 5

Score Ranges of Data Collection Tool

Score Ranges of Options	Meaning	Value of Range
1.00-1.80	Not at all Suitable for Me	"Very Negative" score range
1.81-2.60	Not Suitable for Me	"Negative" score range
2.61-3.40	Slightly Suitable for Me	"Average" score range
3.41-4.20	Quite Suitable for Me	"Positive" score range
4.21-5.00	Totally Suitable for Me	"Very Positive" score range

Validity and Reliability

A data collection tool must be valid and reliable to work for its purpose (Spector, 1981; Secer, 2015). Thus, the validity and reliability of the data collection tool used in this study were first tested by Guven (2004), who developed this measurement tool. After conducting validity studies of exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and expert opinions, Guven (2004) calculated the Cronbach's alpha internal consistency coefficient (α) to test its reliability and accordingly (α) value of the subscales ranges were found rehearsal strategies dimension (α): .61 elaboration strategies dimension (α): .66, organizational strategies dimension (α): .72, strategies for monitoring comprehension(α): .73, affective strategies dimension (α): .70 and the whole scale (α): .74. In this study, CFA for LSDS was applied to a group of 210 individuals except for the sample. Table 6 shows the fit indexes obtained as a result of CFA.

Table 6

The Fit Indexes of the CFA

Indexes	Reference Value		Measurement	Result
	Good Fit	Acceptable Fit		
CMIN/DF	0< χ2/sd ≤ 3	3< χ2/sd ≤ 5	**3,397**	**Acceptable Fit**
TLI	,95< TLI≤ 1	,90 < TLI≤ ,94	**,93**	**Acceptable Fit**
RMSEA	0 ≤ RMSEA ≤ ,05	,05 ≤ RMSEA ≤ ,08	**,048**	**Good Fit**
SRMR	0≤SRMR≤.05	0.05≤SRMR≤.10	**,08**	**Acceptable Fit**
CFI	,95< CFI≤ 1	,90 < CFI≤ ,94	**,92**	**Acceptable Fit**
GFI	,95< GFI≤ 1	,90 < GFI≤ ,94	**,94**	**Acceptable Fit**
AGFI	,95< AGFI≤ 1	,90 < AGFI≤ ,94	**,95**	**Good Fit**
NFI	,95< NFI≤ 1	,90 < NFI≤ ,94	**,97**	**Acceptable Fit**
Sd			**208**	

As a result of DFA, item factor loadings of rehearsal strategies were .74, .71, .78, .79, .71, .80 respectively; the item factor loads of the elaboration strategies were 70, .71, .75, .73, .77, .69, .67, .75, .69, .72, .78, respectively; the item factor loads of organizational

strategies were 68, .67, .72, .72, .71, .67, .71, respectively; the item factor loads of the strategies for monitoring comprehension were.70, .69, 73, .73, .79, .77, .76, .66, .67, respectively and the item factor loads of affective strategies were .63, .65, .70, .71, .77, .72, respectively. As shown in Table 6, the fit indices are according to DFA $\chi 2$ / sd = 3,397, RMSEA = .048, SRMR = .08, CFI = .92, GFI = .94, AGFI = .95, NFI = .97, TLI = .93 as determined. The obtained data show acceptable and good agreement according to Meydan and Sesen (2011), Schermelleh-Engel, Moosbrugger and Muller (2003) and Yildirim and Naktiyok (2017). The internal consistency coefficient of Cronbach Alpha obtained as a result of the analysis of data collected from vocational college students was calculated for both the sub-dimensions and the whole scale. The (α) values reached as a result of calculation; rehearsal strategies dimension (α): .81 elaboration strategies dimension (α): .77, organizational strategies dimension (α): .78, strategies for monitoring comprehension(α): .77, affective strategies dimension (α): .82 and the whole scale (α): .81 were found. According to Ozdamar (1997), these values show that the measurement tool is quite reliable. To make the content validity of the scale used in this research, expert opinion was used. Thus, three field experts (Educational Sciences) and two Turkish Language experts at Kafkas University evaluated the measurement tool. According to the validity and reliability test results, the measurement tool is a valid and reliable measuring instrument.

Data Analysis and Process

To present the research results in an unbiased manner, statistical package programs were used for data analysis. In the data analysis, the significance level was determined as (.05). Normality and homogeneity tests should be performed before deciding which statistical methods will be used in the analysis of research data (Buyukozturk, Cokluk & Koklu 2010; Kalayci, 2010). Levene test value greater than .05 (p> .05) and normality tests p-value greater than .05 (p> .05) show that the distribution is normally and the variances are homogeneous (Mertler & Vannatta, 2005). To determine the normality of the distribution, the mean, mode, median values, skewness - kurtosis values and distribution graphs (Q-Q plot, box plot, histogram) were examined. Normality test results are shown in Table 7.

Table 7

Kolmogorov-Smirnov and Shapiro-Wilk Normality Test Results

Learning Strategies	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	Sd	p	Statistics	Sd	p
Rehearsal Strategies	,121	341	,060	,962	341	,050
Elaboration Strategies	,066	341	,071	,989	341	,059
Organizational Strategies	,084	341	,052	,989	341	,066
Strategies for Monitoring Comprehension	,063	341	,082	,982	341	,086
Affective Strategies	,113	341	,091	,961	341	,092

As shown in Table 7, Kolmogorov-Smirnov (test result for all dimensions: p> .05)

and Shapiro - Wilk (test result for all dimensions: p> .05) normality tests were applied, and the data were normal. Similarly, Levene test values (test results for all dimensions: p> .05) were determined and the variances were homogeneous. Thus, parametric techniques were used to determine the significant differences between the variables and to solve the research sub-problems, frequency analysis, one-way analysis of variance (ANOVA) and independent sample t-test were used.

Results

To answer the research question, the responses of the students to the data collection tool were evaluated, and their means were calculated. Table 8 shows the mean of students according to their learning strategies.

Table 8

Mean Distribution of the Students According to Learning Strategies

Learning Strategies	n	$\overline{X}$	ss	Value	Meaning
Rehearsal Strategies	341	4,22	,51	Very Positive (Very High)	Totally Suitable
Elaboration Strategies	341	3,87	,52	Positive (High)	Highly Appropriate
Organizational Strategies	341	3,38	,56	Moderate	Moderately Appropriate
Strategies for Monitoring Comprehension	341	3,90	,59	Positive (High)	Highly Appropriate
Affective Strategies	341	3,68	,55	Positive (High)	Highly Appropriate

As shown in Table 8, the mean scores of students' responses to LSDS were between the mean value of moderate ($\overline{X}$ = 3.38, ss = .56; organizational strategies) and the very positive (very high) value ($\overline{X}$ = 4.22, ss = .051; rehearsalstrategies). The values of students elaboration strategy ($\overline{X}$ = 3.87, ss = .52), strategies for monitoring comprehension ($\overline{X}$ = 3.90, ss = .59) and affective strategies ($\overline{X}$ = 3.68, ss = .55) were in the range of positive (high) value. Accordingly, the findings suggest that students learn more by rehearsal strategies than other learning strategies.

Table 9

Analysis of Learning Strategies in terms of Gender Variable

Learning Strategies	Gender	n	$\overline{X}$	ss.	sd.	t	p
Rehearsal Strategies	Female	195	4,29	,49	339	4,496	**,000***
	Male	146	4,05	,51			
Elaboration Strategies	Female	195	3,93	,47	339	1,276	,182
	Male	146	3,85	,58			
Organizational Strategies	Female	195	3,45	,66	339	1,383	,168
	Male	146	3,35	,65			
Strategies for Monitoring Comprehension	Female	195	4,00	,54	339	3,634	**,000***
	Male	146	3,77	,63			
Affective Strategies	Female	195	3,77	,47	339	3,775	**,000***
	Male	146	3,55	,62			

As shown in Table 9, according to the independent sample t-test results, it was seen that there was a statistically significant difference between rehearsal strategies of female students ($\overline{X}$ = 4.29, ss = .49) and the rehearsal strategies of male students ($\overline{X}$ = 4.05, ss = .51) ($t_{(339)}$=4.496, p<.05). There was a statistically significant difference between female students strategies for monitoring comprehension ($\overline{X}$ = 4.00, ss = .54) and male students' strategies for monitoring comprehension ($\overline{X}$ = 3.77, ss = .63) ($t_{(339)}$=3.634, p < .05). Similarly, there was a statistically significant difference between the affective strategies of female students ($\overline{X}$ = 3.77, ss = .47) and the affective strategies of male students ($\overline{X}$ = 3.55, ss = .62) ($t_{(339)}$ = 3.775, p < .05). However, there was no statistically significant difference concerning gender variable between vocational college students'elaboration strategies ($t_{(339)}$ = 1.276, p> .05) and the organizational strategies ($t_{(339)}$ = .383, p> .05).

Table 10

Analysis of Learning Strategies Concerning Forms of Level Variable

Learning Strategies	Form of Level	n	$\overline{X}$	ss.	sd.	t	p
Rehearsal Strategies	Daytime	235	4,12	,53	339	-3,642	**,000***
	Evening	106	4,33	,42			
Elaboration Strategies	Daytime	235	3,81	,54	339	-2,625	**,009***
	Evening	106	3,97	,46			
Organizational Strategies	Daytime	235	3,41	,65	339	,35	,972
	Evening	106	3,41	,67			
Strategies for Monitoring Comprehension	Daytime	235	3,87	,62	339	-1,320	,188
	Evening	106	3,97	,52			
Affective Strategies	Daytime	235	3,64	,58	339	-1,950	,052
	Evening	106	3,77	,48			

Table 10 shows the independent sample t-test to determine the difference between the type of teaching and learning strategies. Accordingly, a statistically significant difference was observed between the rehearsal strategies of daytime teaching students ($\overline{X}$ = 4.12 ss = .53) and the rehearsal strategies of evening education students ($\overline{X}$ = 4.33, ss = .42) ($t_{(339)}$ = - 3.642, p <.05). Similarly, there was a statistically significant difference between the elaboration strategies ($\overline{X}$ = 3.81 ss = .54) of daytime teaching students and the elaboration strategies ($\overline{X}$ = 3.97, ss = .46) of evening education students ($t_{(339)}$ = -2.625, p <.05). However, there was no statistically significant difference concerning forms of level variable between vocational college students' organizational strategies of ($t_{(339)}$=.35, p>.05), strategies for monitoring comrehension ($t_{(339)}$=-1.320, p>.05), and affective strategies ($t_{(339)}$ = - 1.950, p> .05).

Table 11

Analysis of Learning Strategies in terms of Department Variable

Learning Str.	Department	n	$\overline{X}$	ss.		sd.	Mean Squ.	F	p	Diff.
Rehearsal Strategies	1 Early Childhood	146	4,18	,50	Within Group	336	,639	2,482	,054	--
	2 Private Security and Protection	51	4,16	,50						
	3 Public Affairs	44	4,05	,55						
	4 Occupt. Health and Safety	43	4,06	,43	Between Group	4	,487			
	5 Logistics	57	4,19	,54						
Elaboration Strategies	1 Early Childhood	146	3,95	,47	Within Group	336	,827	3,088	**,016***	1>3, 1>4, 1>5
	2 Private Security and Protection	51	3,92	,57						
	3 Public Affairs	44	3,72	,59						
	4 Occupt. Health and Safety	43	3,75	,56	Between Groups	4	,268			
	5 Logistics	57	3,77	,49						
Organizational Strategies	1 Early Childhood	146	3,45	,67	Within Group	336	,252	,585	,673	--
	2 Private Security and Protection	51	3,46	,67						
	3 Public Affairs	44	3,34	,77						
	4 Occupt. Health and Safety	43	3,31	,46	Between Groups	4	,431			
	5 Logistics	57	3,40	,64						
Strategies for Monitoring Comprihension	1 Early Childhood	146	3,98	,53	Within Group	336	1,598	4,736	**,001***	1>3, 2>3, 4>3, 5>3
	2 Private Security and Protection	51	3,96	,58						
	3 Public Affairs	44	3,56	,84						
	4 Occupt. Health and Safety	43	3,86	,40	Between Groups	4	,337			
	5 Logistics	57	3,95	,57						

Table 11 Continue

Learning Str.	Department	n	$\overline{X}$	ss.		sd.	Mean Squ.	F	p	Diff.
Affective Strategies	1 Early Childhood	146	3,78	,45	Within Group	336	1,784	6,242	**,000***	1>3, 2>3, 5>3
	2 Private Security and Protection	51	3,81	,54						
	3 Public Affairs	44	3,38	,75						
	4 Occupt. Health and Safety	43	3,56	,42	Between Groups	4	,286			
	5 Logistics	57	3,62	,60						

As we can see in Table 11, there was a statistically significant difference between the departments of vocational college students and their elaboration strategies [$F_{(4-336)}$ = 3.088, p <.05]. According to the results of the LSD test performed to determine the source of the difference, there was a statistically significant difference between the mean of the students of the Early Childhood Department ($\overline{X}$ = 3.95, ss = .47) and the mean of the students of the Public Affairs Department ($\overline{X}$ = 3.72, ss = .59). Similarly, there was a statistically significant difference between the means of the Early Childhood Department students ($\overline{X}$ = 3.95, ss = .47) and the means of the Department of Occupational Health and Safety students ($\overline{X}$ = 3.75, ss = .56) and that of Logistics Department of students ($\overline{X}$ = 3.77, ss = .49). The findings showed that there was a statistically significant difference between vocational college students' strategies for monitoring comprehension and their departments [$F_{(4-336)}$ = 4.736, p <.05]. According to the results of the LSD test to determine the source of the difference, there was a statistically significant difference between the means of the students of the Public Affairs Department ($\overline{X}$ = 3.56, ss = .84) and respectively, the means of the students of the Early Childhood Department ($\overline{X}$ = 3.98, ss = .53), the means of the students of the Private Security and Protection Department ($\overline{X}$ = 3.96, ss = .58), the means of the students of the Occupational Health and Safety Department ($\overline{X}$ = 3.86, ss = .40) and that of students of the Logistics Department ($\overline{X}$ = 3.95, ss = .57).

There was also a statistically significant difference between the affective strategies and the departments of vocational college students [$F_{(4-336)}$ = 6.242, p <.05]. According to the results of the LSD test performed to determine the source of the difference, it can be concluded that there was a statistically significant difference between the means of the students of the Public Affairs Department ($\overline{X}$ = 3.38, ss = .75) and respectively, the means of the students of the Early Childhood Department ($\overline{X}$ = 3.78, ss = .45), the means of the students of the Private Security and Protection Department ($\overline{X}$ = 3.81, ss

= .54) and the means of students of the Logistics Department ($\overline{X}$ = 3.62, ss = .60). However, there was no statistically significant difference between vocational college students' departments and the means of rehearsal strategies [$F_{(4-336)}$ = 2.482, p> .05] and the means of organizational strategies [$F_{(4-336)}$ = .585, p> .05].

Discussion, Conclusion and Recommendations

In this study, the first research problem, the question of "What are the learning strategies of the vocational college students?" was answered. According to the results of this research, the utilized survey method, which is one of the quantitative research methods, the least (moderately) used learning strategy of the students is the organizational strategy. The learning strategy that students have the most is the rehearsal strategy which is determined as a high level. Signification, monitoring comprehension and affective strategies were determined as high value. Yaacob et al. (2018) reached similar results of the present research findings that it was concluded that the learning strategies of learners might differ. Glogger et al. (2012) concluded that students were generally successful in one learning strategy. Tay and Yangin also reached a similar finding with the findings of the research conducted in 2008; stated that students frequently use rehearsal strategies. However, Cirpan et al. (2017) obtained different results from this research that among the students' learning strategies, the most commonly used strategies were elaboration and affective strategies.

In addition to the research question, it was examined whether there is a statistically significant difference between the variables (gender, department, forms of level, the educational level of parents and high school achievement score) of the vocational college students to answer the determined sub-problems. According to the obtained results, there was a significant difference between the gender of the students and their learning strategies. The students' rehearsal strategies, monitoring comprehension and affective strategies differ according to their genders. It is seen that this differentiation is in favor of female students in all three learning strategies. In other words, it can be concluded that female students use rehearsal strategies, monitoring comprehension and affective strategies at a higher level than male students. Similar results were found in the studies conducted by Guven (2004), Babali (2010), Demirel (2012) and Alfian (2016). Significant differences were found between students' gender and learning strategies. In addition to the results of this research, it was found that there is a significant difference between the forms of level and learning strategies of vocational college students. The rehearsal strategies and elaboration strategies of the students differ according to their forms of the level. It is seen that this difference is in favor of the evening education students both in the rehearsal strategies and the elaboration strategies. According to this, it can be concluded that the evening education students use rehearsal strategies and elaboration strategies at a higher level than the daytime teaching students. Similar research results showed that Kocak (2010) and Cirpan et al. (2017); and significant differences were found between the forms of the level of students and their learning strategies. Another result of this study is that there is a significant difference between the students' education departments and learning

strategies. There is a significant difference between the students' departments and their elaboration strategies. It is seen that this difference is only in favor of the students of the Department of Early Childhood in all departments. It can be concluded that the students of the Department of Early Childhood use their elaboration strategies at a higher level than the students of other departments (Public Affairs, Private Security and Protection, Occupational Health and Safety and Logistics). Students' monitoring comprehension strategies and affective strategies differ according to their departments. It is concluded that these differences are only against the students of the Public Affairs Department in all departments. In other words, it can be concluded that the students of the Public Affairs Department use lower-level monitoring comprehension and affective strategies than the students of other departments (Early Childhood, Private Security and Protection, Occupational Health and Safety and Logistics). Similar research findings were found in the studies conducted by Hamurcu (2002), Guven (2004), Babali (2010), Tay and Yangin (2010) and Yaacob et al. (2018). It is concluded that there are significant differences between the departments of the students and their learning strategies. There was no significant difference between the educational level of parents, high school achievement scores and learning strategies of the vocational college students. However, in the study conducted by Ozturk (1995) and Yaacob et al. (2018), significant differences were found between the educational level of the parents and the learning strategies of the students. On the other hand, contrary to the results of the present research, Ozturk (1995), Tay and Yangin (2008), Kocak (2010) and Alfian (2016) found that there were significant differences between students' high school achievement scores and learning strategies.

Recommendations

Given that students have different learning strategies, it may be suggested that course content, teaching strategy, methods and techniques should be determined by considering the individual characteristics of the students.It may be suggested that the appropriate teaching-learning processes are planned for the rehearsal strategies, which is the most commonly used learning strategy by the students. It may be suggested to carry out activities to develop organizational strategies, which are the least used learning strategies by students. Given that female students use rehearsal, monitoring comprehension and affective strategies at a higher level than male students, it may be suggested to support the use of these learning strategies by female students and encourage male students to develop these learning strategies. When it is considered that the evening education students use the rehearsal strategies and the elaboration strategies at a higher level than the daytime teaching students, it may be suggested to support the evening education students for enhancing these learning strategies and to encourage daytime teaching students for developing for mentioned learning strategies. It may be suggested that students of the Public Affairs, Private Security and Protection, Occupational Health and Safety and Logistics Department should be encouraged to use the elaboration strategies. It may be suggested to plan activities for the students of the Public Affairs Department to develop their strategies for monitoring comprehension and affective strategies. It may be suggested that similar studies can be applied to different educational levels. This study is limited to

Kafkas University, Sarikamis Vocational College. Studies with different populations and samples may be recommended. It may be suggested that qualitative or mixed studies can be applied to examine the situation in more detail.

References

Acikgoz, K. (1998). *Etkili ogrenme ve ogretme.* İzmir: Kanyilmaz Matbaasi.

Alfian, A. (2016). The application of language learning strategies of high school students in Indoneisia. *Indonesian Journal of English Education, 3*(2), 141-157.

Arends, R. (1997). I. *Clasroom instruction and management*. New York: The Mc - Graw - Hill.

Arli, M., & Nazik, H. (2001). *Bilimsel arastirmaya giris.* Ankara: Gazi Kitabevi

Babali, O. (2010). *Kiz meslek liseleri ve genel liselerdeki ogrencilerin ogrenme strateji ve stillerinin karsilastirilmali olarak incelenmesi.* (Unpublished master dissertation). Selcuk Universitesi Sosyal Bilimler Enstitusu, Konya. It has been obtained from the Higher Education Board National Thesis Center. (Thesis Number: 264397).

Bagceci, B. (2017). *Yaratici dusunme, elestirel dusunme ve yansitici dusunme.* (Ed. B. Oral, T. Yazar). Egitimde Program Gelistirme ve Degerlendirme. Ankara: Pegem Akademi.

Bustami, Y., Corabime, A. D., & Suarsini, E. (2017). The social attitude empowerment of biology students: Implementation jirqa learning strategy in different ethnics. *International Journal of Instruction*, *10*(3), 15 – 30.

Buyukozturk, S., Cakmak, E. K., Akgun, O. E., Karadeniz, S., & Demirel, F. (2017). *Bilimsel arastirma yontemleri* (23. Baski). Ankara: Pegem Akademi.

Buyukozturk, S., Cokluk, O., & Koklu, N. (2010). *Sosyal bilimler icin istatistik*. Ankara: Pegem Akademi.

Creswell, J. W. (2012). *Educational research, planning, conducting and evaluating quantitative and qualitative research* (4nd Ed). Boston: Pearson Education Inc.

Critensen, B. L., Johnson, R. B., & Turner, L. A. (2015). *Research methods, design and analysis (*12th Edt.). Harlow: Rearson Education Limited.

Cirpan, K. F., Gurer, A. Gayef, A., & Kaplan, E. (2017). Saglik hizmetleri meslek yuksekokulu anastezi bolumu ogrencilerinin ogrenme stratejileri. *Marmara Saglik Hizmetleri Dergisi, 1*(1), 25-29.

Demirel, M. (2012). Universite ogrencilerinin kullandiklari dil ogrenme stratejileri. *Hacettepe Universitesi Egitim Fakultesi Dergisi, 43,* 141-153.

Demirel, M. (1993). Ogrenme stratejilerinin ogretilmesi. *Egitim ve Bilim, 17*(83), 52-59.

Demirel, O. (2005). *Egitim sozlugu* (3. Baski). Ankara: Pegema Yayincilik.

Erdem, A. R. (2005). Ogrenmede etkili yollar: Ogrenme stratejileri ve ogretimi. *Ilkogretim Online, 4*(1), 1-6

Erden, M., & Akman Y. (1998). *Egitim psikolojisi, gelisim-ogrenme-ogretme.* Ankara: Arkadas Yayinlari.

Erkus, A. (2016). *Psikolojide olcme ve olcek gelistirme 1 temel kavramlar ve islemler*. Ankara: Pegem Akademi.

Gagne, R. M. (1988). *Principles of instructional design.* Chicago: Halt, Rinehart and Winston.

Gagne, R. M., & Glaser, R. (1987). *Foundations in learning research.* (Ed. R. M. Gagne). Instructional Technology: Foundations. New Jersey: Lawrence Erlbaum Associates.

Gay, L. R., Mills, G. E., & Airasian, P. (2012). *Educational research competencies for analysis and applications* (10th Edt.). Harlow: Rearson Education Limited.

Glogger, I., Schwonke, R., Holzapfel, L., Nuckles, M., & Ankel, A. (2012). Learning strategies assessed by journal writing: predicting of learning outcomes by quantity, quality and combinations of learning strategies. *Journal of Educational Psychology.* Advance online publication. doi: 10.1037/a0026683.

Guven, M. (2004). *Ogrenme stratejileri ile Ogrenme stilleri arasindaki iliski.* (Published doctoral dissertation). Anadolu Universitesi, Egitim Bilimleri Enstitusu, Eskisehir. It has been obtained from the Higher Education Board National Thesis Center. (Thesis Number: 143975).

Hamilton, R. (1989). The effects of learner generated elaborations on concept learning from prose. *Journal of Experimental Education, 57*, 205-217.

Hamurcu, H. (2002). Okuloncesi ogretmen adaylarinin kullandiklari ogrenme stratejileri. *Hacettepe Universitesi Egitim Fakultesi Dergisi, 23,* 127-134.

Harmanli, Z. (2000). *Ogrenme stratejileri (etkili ogrenme egitimi).* İzmir: Dokuz Eylul Universitesi Buca Egitim Fakultesi Yayinlari.

Hartman, V. (1995). Teaching and learning style preferences: Transition through technology, *VCCA Journal, 9*(2), 18-20.

He, Q. (2017). Quantitative research in systemic functional linguistics. *English Language Teaching,11*(1): ISSN 1916-4742 E-ISSN 1916-4750 Published by Canadian Center of Science and Education.

Kalayci, S. (2010). *SPSS uygulamali cok degiskenli istatistik teknikleri* (5. Baski). Ankara: Asil Yayin Dagitim.

Kistner, S., Rakoczy, K., Otto, B., Klieme, E., & Buttner, G. (2015). Teaching learning strategies: The role of instructional context and teacher beliefs. *Journal of Educational Research Online, 7*(1), 176-197.

Kocak, S. (2010). Aktif ogrenme yonteminin ogrencilerin bilisim teknolojileri dersindeki basarilari ve ogrenme stratejileri duzeyleri uzerindeki etkileri. (Published doctoral dissertation). Dokuz Eylul Universitesi, Egitim Bilimleri Enstitusu, İzmir. It has been obtained from the Higher Education Board National Thesis Center. (Thesis Number: 270095).

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, *30*(3), 607-610.

Levin, J. R. (1988). Elaboration – based learning strategies: Powerful theory – powerful application. *Contemporary Educational Psychology, 13,* 191-205.

McMillan, J., & Schumacher, S. (2014). *Research in education evidence – based inquiry* (7th Edt.). Harlow: Rearson Education Limited.

Mertler, C. A., & Vannatta, R. A. (2005). *Advanced and multivariate statistical methods: Practical application and interpretation* (3nd Ed). United States: Pyrczak Publishing.

Meydan, C. H., & Sesen, H. (2011). *Yapisal esitlik modellemesi Amos uygulamalari.* Istanbul: Detay Yayincilik.

Ormrod, E. J. (1990). *Human learning theories, priciples and educational applications.* Ohio: Merrill Publishing Company.

Ozdamar, K. (1997). *Paket programlar ile istatistiksel veri analizi*. Eskisehir: Anadolu Universitesi Yayinlari.

Ozer, B. (2001). *Ogrenmeyi ogretme, ogretimde planlama ve degerlendirme*. Eskisehir: Anadolu Universitesi Yayinlari.

Ozer, B. (1998). *Ogrenmeyi ogretme* (Ed. A. Hakan). Egitim Bilimlerinde Yenilikler. pp. (146-164). Eskisehir: Anadolu Universitesi Acikogretim Fakultesi İlkogretim Ogretmenligi Lisans Tamamlama Programi.

Ozturk, B. (1995). *Genel ogrenme stratejilerinin ogrenciler tarafindan kullanilma durumu.* (Published doctoral dissertation). Gazi Universitesi, Sosyal Bilimler Enstitusu, Ankara. It has been obtained from the Higher Education Board National Thesis Center. (Thesis Number: 41215).

Pritchard, A. (2009). *Ways of learning learning theories and learning styles in the classroom.* (2nd Ed.), London and Newyork. Routledge Taylor and Francis Group.

Saribas, D. (2009). *Ozduzenlemeye dayali ogrenme stratejilerini gelisitirmeye yonelik laboratuar ortaminin kavramsal anlama, bilimsel islem becerisi ve kimyaya karsi tutum uzerindeki etkisinin incelenmesi.* (Published doctoral dissertation). Marmara Universitesi, Egitim Bilimleri Enstitusu, İstanbul. It has been obtained from the Higher Education Board National Thesis Center. (Thesis Number: 420677).

Schermelleh-Engel, K., Moosbrugger, H., & Muller, H. (2003). Evaluating the fit of structural equation models: tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online, 8*(2), 23-74.

Schunk, H. D. (2014). *Ogrenme teorileri egitimsel bir bakisla.* (Ceviri: Mahmut Yasin Demir). (Cev. Edt. Muzaffer Sahin). Ankara: Nobel Yayinlari.

Shi, H. (2017). Learning strategies and classification in education. *Institute for Learning Styles Journal, 1,* 24-36.

Secer, I. (2015). *Psikolojik test gelistirme ve uyarlama sureci SPSS ve LISREL uygulamalari.* Ankara: Ani Yayincilik.

Senemoglu, N. (1998). *Gelisim ogrenme ve ogretim - kuramdan uygulamaya*. Ankara: Ozsen Matbaacilik.

Somuncuoglu, Y. (1998). Ogrenme stratejileri: teorik boyutlari, arastirma bulgulari ve uygulama icin ortaya koydugu sonuclar. *Egitim ve Bilim, 22*(110), 31-39.

Sonmez, V. (2007). *Program gelistirmede ogretmen elkitabi* (13. Baski). Ankara: Ani Yayincilik.

Spector, P. E. (1981). *Research Design Series: Quantitative Applications in the Social Sciences.* London: Sage Publications Inc.

Subasi, G. (2000). Etkili Ogrenme: Ogrenme Stratejileri. *Milli Egitim Dergisi, 146.* https://dhgm.meb.gov.tr/yayimlar/dergiler/Milli_Egitim_Dergisi/146/subasi.htm. Erisim Tarihi: 20.10.2018.

Simsek, A., & Balaban, J. (2010). Learning strategies of successful and unsuccessful university students. *Contemporary Educational Technology, 1*(1), 36-45.

Tasdemir, A., & Tay, B. (2007). Fen bilgisi ogretiminde ogrencilerin ogrenme stillerini kullanmalarinin akademik basariya etkileri. *Uludag Universitesi Egitim Fakultesi Dergisi, 20(1),* 173-187.

Tay, B., & Yangin, B. (2008). 4. sinif ogrencilerinin sosyal bilgiler dersinde sinif ortaminda kullandiklari ogrenme stratejileri. *Ahi Evran Universitesi Kirsehir Egitim Fakultesi Dergisi, 9*(3), 73-88.

Turkish Language Society,(2005). *Turkce sozluk*(10. Baski). Turk Dil Kurumu Yayinlari: 549.

Weinstein, C. E., & Mayer, R. E. (1986). *The teaching of learning strategies*. (Ed. M. C. Wittock). Handbook of Research on Teaching. pp. (315 - 327). New York: Maccmillan Company.

Yaacob, A., Shapii, A., Saad, A., Al-Rahmi, W., & Alias, N. (2018). Vocabulary learning strategies (VLSS) through secondary students at Saudi School in Malaysia (SSM): A pilot study. *International Education and Research Journal,4*(2).

Yazicioglu, Y., & Erdogan, S. (2004). *SPSS uygulamali bilimsel arastirma yontemleri.* Ankara: Detay Yayincilik.

Yildirim, F., & Naktiyok, S. (2017). The mediating role of organizational support in the effect of transformational leadership on employee empowerment. *Polish Journal of Management Studies, 16*(1), 292-303.

Meslek Yüksekokulu Öğrencilerinin Öğrenme Stratejilerinin Çeşitli Değişkenler Açısından İncelenmesi

Atıf:

Engin, A. O., & Korucuk, M. (2019). The examination of learning strategies of vocational college students in terms of various variables. *Eurasian Journal of Educational Research 89, 1-24,* DOI: 10.14689/ejer.2020.89.1

Özet

Problem Durumu: İçinde bulunulan bilgi çağında önemli olan bilgileri olduğu gibi almak değil; bilgiye ulaşma/değiştirme/kullanma yollarının öğrenilmesidir. Amerikan eğitimci John Dewey'in de dediği gibi "Düşünmeyi öğrenme, öğrenmeyi öğretmektir". Bu sebeple öğrencilerin öğrenmeyi öğrenmelerine öncelik verilmelidir. Alanyazında öğretmenlerin öğrencilerinin öğrenme stratejileriyle ilgilenmesi ve bu konuda farkındalık yaratması gerektiğine sıklıkla vurgu yapılmaktadır. Öğrencilerin öğrenmeyi öğrenebilmesi için ise öncelikle hangi öğrenme stratejisine sahip olduklarını bilmeleri gereklidir. Bu araştırma ile meslek yüksekokulu öğrencilerinin öğrenme stratejilerinin belirlenmesi amaçlanmıştır. İlgili araştırmalar da değerlendirildiğinde; bu araştırmada meslek yüksekokulu öğrencilerinin öğrenme stratejileri ile cinsiyetleri, bölümleri, öğrenim türleri, anne-baba eğitim durumları ile lise başarı puanları arasında istatistiksel olarak anlamlı farklılıkların olup olmadığının belirlenmesi amaçlanmıştır. Böylelikle meslek yüksekokulunda görevli akademisyenlerin öğrencilerini daha iyi tanımalarına katkı sağlanabilir ki bu durum ise, meslek yüksekokulu öğrencilerinin öğrenme süreçlerinde olumlu değişikliklere sebep olabilmesi açısından önem taşımaktadır.

Araştırmanın Amacı: Bu çalışmanın amacı, Türkiye Cumhuriyeti'nin doğusunda bulunan bir devlet üniversitesi olan Kafkas Üniversitesi, Sarıkamış Meslek Yüksekokulu'nda 2018-2019 eğitim-öğretim yılında öğrenim gören öğrencilerin öğrenme stratejilerinin cinsiyet, bölüm, öğrenim türü, anne–baba eğitim durumu ve lise başarı puanları değişkenleri açısından farklılaşma durumlarının belirlenmesidir.

Araştırmanın Yöntemi: Bu çalışmada meslek yüksekokulu öğrencilerinin öğrenme stratejilerinin neler olduğu ve bu stratejilerin çeşitli değişkenler açısından veri toplanarak incelenmesi amaçlandığı için nicel araştırma yöntemlerinden tarama modeli kullanılmıştır. Bu çalışmanın evreni 2018-2019 eğitim-öğretim yılında öğrenim gören Kafkas Üniversitesi Sarıkamış Meslek Yüksekokulu öğrencilerinden (561 öğrenci) oluşmaktadır. Bilimsel yöntemler kullanılarak hesaplanan ve ulaşılması gereken örneklem büyüklüğü en az 228 kişi olmalıdır. Bu çalışmada ise 341 kişiye

ulaşılmıştır. Araştırmada kullanılan veri toplama aracı iki kısımdan oluşmaktadır. Birinci kısımda "Kişisel Bilgi Formu" yer alırken, ikinci kısımda ise "Öğrenme Stratejileri Belirleme Ölçeği (ÖSBÖ)" bulunmaktadır. Kişisel Bilgi Formu ile öğrencilere ait cinsiyet, bölüm, öğrenim türü, anne – baba eğitim durumu ve lise başarı durumu değişkenlerine ait veriler toplanmaktadır. Güven (2004) tarafından geliştirilen ÖSBÖ beşli likert tipi bir değerlendirmeye sahiptir. Ölçme aracı ile ilgili gerek daha önceki çalışmalarda yapılmış olan gerek bu araştırmada yapılan geçerlik – güvenirlik test sonuçlarına göre; ölçme aracının geçerli ve güvenilir olduğu sonucuna ulaşılabilir. Veri analizi yapılırken istatistik paket programlardan faydalanılmıştır. Veri analizinde anlamlılık seviyesi "p=.05" olarak belirlenmiştir. Araştırma verileri normal dağılım gösterirken varyansları da homojendir. Bu sebeple analiz sürecinde parametrik teknikler kullanılmıştır.

Araştırmanın Bulguları: Bu araştırmada elde edilen bulgulara göre öğrencilerin en az sahip oldukları öğrenme stratejisi orta düzey olarak tespit edilen örgütleme stratejisidir. Öğrencilerin en fazla sahip oldukları öğrenme stratejisi ise yüksek düzey olarak belirlenen yineleme stratejisidir. Anlamlandırma, anlamayı izleme ve duyuşsal stratejiler ise yüksek değer olarak belirlenmiştir. Bu araştırmada öğrencilerin cinsiyetleri ile öğrenme stratejileri arasında anlamlı bir farka rastlanmıştır. Öğrencilerin sahip oldukları yineleme stratejileri, anlamayı izleme ve duyuşsal stratejiler cinsiyetlerine göre farklılaşmaktadır. Bu farklılaşmanın üç öğrenme stratejisinde de kız öğrenciler lehine olduğu görülmektedir. Meslek yüksekokulu öğrencilerinin öğretim türleri ile öğrenme stratejileri arasında anlamlı bir farklılık olduğu da tespit edilmiştir. Öğrencilerin sahip oldukları yineleme stratejileri ve anlamlandırma stratejileri öğretim türlerine göre farklılaşmaktadır. Bu farklılığın hem yineleme stratejisinde hem de anlamlandırma stratejisinde ikinci öğretim öğrencileri lehine olduğu görülmektedir. Bu araştırmada öğrencilerin öğrenim gördükleri bölümleri ile öğrenme stratejileri arasında anlamlı bir farklılık olduğu da tespit edilmiştir. Öğrencilerin bölümleri ile sahip oldukları anlamlandırma stratejileri arasında anlamlı bir farklılık vardır. Bu farklılığın tüm bölümler içerisinde sadece Çocuk Gelişimi Bölümü öğrencileri lehine olduğu görülmektedir. Öğrencilerin sahip oldukları anlamayı izleme stratejileri ve duyuşsal stratejiler de bölümlere göre farklılaşmaktadır. Bu farklılıkların tüm bölümler içerisinde sadece Yerel Yönetimler Bölümü öğrencilerinin aleyhine olduğu belirlenmiştir.

Araştırmanın Sonuçları ve Önerileri: Meslek yüksekokulu öğrencilerinin öğrenme stratejileri ile cinsiyetleri, öğretim türleri ile bölümleri arasında anlamlı düzeyde farklılıklar bulunmaktadır. Ancak Meslek yüksekokulu öğrencilerinin anne – baba eğitim durumları, lise başarı puanları ve öğrenme stratejileri arasında ise yapılan istatistik testler sonucunda anlamlı düzeyde bir farklılığa rastlanamamıştır. Araştırma sonucunda öğrencilerin yineleme stratejisini diğer öğrenme stratejilerine göre daha fazla kullandığı sonucuna varılabilir. Diğer taraftan öğrencilerin en az kullandığı (orta düzey) öğrenme stratejisi ise örgütleme stratejisidir. Öğrenciler diğer stratejiler olan anlamlandırma, anlamayı izleme ve duyuşsal stratejileri ise (yüksek düzey) olarak kullanmaktadırlar. Bu araştırma sonuçları doğrultusunda birtakım öneriler geliştirilmiştir. Bu önerilerin başında öğrencilerin farklı öğrenme stratejilerine sahip

oldukları göz önüne alınarak ders içeriği, öğretim stratejisi, yöntem ve tekniklerinin öğrencilerin bireysel özelliklerinin göz önüne alınarak belirlenmesi gelmektedir. Öğrencilerin en çok kullandıkları öğrenme stratejisi olan yineleme stratejisine uygun öğretme – öğrenme süreçlerinin planlanması önerilebilir. Öğrencilerin en az kullandıkları öğrenme stratejisi olan örgütleme stratejilerinin geliştirilmesine yönelik faaliyetlerin yürütülmesi önerilebilir. Kız öğrencilerin yineleme, anlamayı izleme ve duyuşsal stratejileri erkek öğrencilere oranla daha yüksek seviyede kullandığı göz önüne alındığında; kız öğrencilerin bu öğrenme stratejilerini kullanmalarının desteklenmesi ve erkek öğrencilerin ise bu öğrenme stratejilerinin geliştirilmesine yönelik çalışmaların yürütülmesi önerilebilir. İkinci öğretim öğrencilerinin yineleme stratejileri ile anlamlandırma stratejilerini birinci öğretim öğrencilerine göre daha yüksek seviyede kullandığı değerlendirildiğinde; ikinci öğretim öğrencilerinin bu öğrenme stratejilerini kullanmalarının desteklenmesi ve birinci öğretim öğrencilerinin ise bu öğrenme stratejilerinin geliştirilmesine yönelik çalışmalar yürütülmesi önerilebilir. Yerel Yönetimler, Özel Güvenlik ve Koruma, İş Sağlığı ve Güvenliği ile Lojistik Bölümü öğrencilerinin anlamlandırma stratejisini kullanmasının teşvik edilmesi-özendirilmesi önerilebilir. Yerel Yönetimler Bölümü öğrencilerinin anlamayı izleme ve duyuşsal stratejilerinin geliştirilmesi amacıyla etkinlikler planlanması önerilebilir. Bu çalışmaya benzer çalışmaların farklı eğitim kademelerine de uygulanması önerilebilir. Bu çalışma Kafkas Üniversitesi, Sarıkamış Meslek Yüksekokulu ile sınırlıdır. Farklı evren ve örneklemler ile çalışmalar yapılması önerilebilir. Durumun daha detaylı incelenebilmesi için nitel veya karma çalışmaların da yapılması önerilebilir.

Anahtar Kavramlar: Öğrenme stratejileri, meslek yükokulu öğrencileri, öğrenmeyi öğrenmek.