academicJournals

Vol. 12(7), pp. 425-431, 10 April, 2017 DOI: 10.5897/ERR2016.3118 Article Number: 21C8AEA63544 ISSN 1990-3839 Copyright © 2017 Author(s) retain the copyright of this article http://www.academicjournals.org/ERR

Educational Research and Reviews

Full Length Research Paper

Comparison of movement notation (Laban) and traditional methodological learning success in teaching folk dances

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Received 21 December, 2016; Accepted 14 March, 2017

In this research, Movement Notation (Laban) and Traditional Method in Folk dance Teaching were compared in terms of learning success. Movement notation group (n = 14) and Traditional group (n = 14) consisting of students from the S.U. State Conservatory Turkish Folk Dance Department were formed. During the 14 week long study, the symbols of the Movement Notation (Laban) have been taught by exemplifying motifs in Turkish Folk Dances. Groups were formed by neutral assignment and "post-test control group model" was used. In the analysis of the data, parametric analysis and descriptive statistics were applied in solving sub problems. The learning achievements of the students in the Movement Notation (Laban) and the traditional group were compared both in terms of individual and group averages. It was determined that both the individual and group learning success of the Movement Notation Group (Laban) in the direction of the findings were higher than in the Traditional Learning Group (P<0.05).

Key words: Turkish folk dances, movement notation (Laban), traditional learning method, learning achievement.

INTRODUCTION

Learning is the change that occurs in the behaviors of the individual as a result of his/her ordeal that he or she experiences as a result of life experiences. In general, all activities arranged in order to realize learning in people are called teaching (Sönmez, 1991). Eroğlu (1995, p. 22) refers to the Turkish Folk Dances as "teaching the culture that reflects the cultural value of the society it belongs to, without musical instruments or with a musical

accompaniment, which is a tragic and culturally related to an event, a joyful, Taking tempo from the music they perform by singing folk songs".

Sinasi Ünal defines folk dances as "teaching and learning activities that occur between teachers and students" and classifies folk dances as classical and systematic methods and collects the systematic method in six sub-titles (Ünal, 2007, pp. 18-21). Physical

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Education Classical (traditional) method called "Demonstration" in Sports Science is expressed as "the motions of the tutors are modeled on their students and the students are asked to repeat these movements" (Çakır 2009, p. 87).

"Many authors stress the importance of movement observation and analysis in the territory of movement education. Sweeney (1970) thinks that if the student can conceptualize and verbalize the movement, she/he also understands it. By the means of understanding the acquisition of the movement needs less rehearsal and the movement stays in memory for a longer time" (transporter Fügedi, 2003, p. 397). Cognitive teaching can be realized by using notes as if it is in music in the teaching of folk dances where the psychomotor and cognitive field is predominantly used. It is only possible with a symbol system that the concept of motion is realized at the correct value grade of cognitive field teaching. This system of symbols is named as movement Notation in the art of dance. When we look at the historical backgrounds of motion notation systems, it appears that various methods have been developed. including Egyptian hieroglyphs. "Thoinot Orchesographie" "Choregraphie ou l'Art de Decrire La Dance" "Stenochogergaphie" "Grammatik der Tnazkunst" Stepanov "Alphabet des Mouvements and Corps Humain" are some of these systems (Fügedi, 2011). "Raol Auger Le Feuillet, a pupil of Beauchamp and likewise a member of the Academy, invented the first modern dance notation since the fifteenth century: he was the predecessors of Fisher-Klamt, Laban, and Neumann" (Sachs, 1965, p. 395). However, by the 20th century, especially the two systems were made very common in Europe and England, and they were systematically included in their education, teaching and choreography. These are Benesh Movement Notation and Labanotation (Kinetography/Laban). The Benesh Dance Notation was created in 1955 by Joan Benesh and her husband Rudolf Benesh from Sadler's Ballet Ensemble Dance Society in England. In 1962, the system was taught by the Korean Institute of Chorology, which was established within the Royal Ballet of England (Senel, 1990). "Laban was created in 1928 by Rudolf Van Laban in Hungary and was named by its creator," Brown (2008, p. 8), "a writing system in which all movements that can be made by the body are simply taken into account. Laban, which is not only used in dance but also in many other areas, was later named as Kinetography. "It continues to be used in fields traditionally associated with the physical body, such as dance choreography, physical therapy and drama. It has also been applied in anthropology and industrial production. It can be used for analysis and choreography of all forms of human movement" (Locke et al., 2005, p. 114).

"A main feature of Laban's notation system is his invention of using the vertical staff; music notation and previous notation systems before him were set horizontally across the page. The vertical placement has

a strong advantage in that it represents the human body from the dancer's point of view. Laban developed new ideas and encouraged future developments of his notation system to be made by dancers and movement analysts" (Lack, 2012, p. 10).

Traditional methods are easier and preferable because they are based on cultural codes and visual memory. The Laban system, however, allows you to learn all kinds of sections in detail. Like visual aids used in teaching mathematics and other subjects, Laban provides a similar visual method for dance and physical education. As Laban system provides a teaching based on cognitive bases, it is more persistent. It provides a similar record of the performance performed on persons in dance (e.g. video or dance) (Guest, 2005). The embodiment of the chapter in mind helps to make it easier to understand.

At the same time, this system is thought to contribute to student coding, analysis and synthesis. Royce (2002, p. 68) emphasized Laban's importance by saying: "Laban records all the movement the body parts can make so it gives the researcher a chance to make ethical observations".

Notation systems used in dance art as well as in music art both for recording movements and for analyzing studies. As Guest (2005, p. 5) stated, "Labanotation serves as much as music notation for dance art serves music art. Partition is an important part of the work of the composer, teacher, student and of course the dancer". Undoubtedly, in addition to many studies with cultural features such as the Movement Notation (Laban), many of the techniques of the movement culture will play a crucial role in keeping the original and registering it, in spite of the long time it takes to learn it. It also means the use of a common language in the world. In the field of dance education there are no any teaching materials which provide cognitive learning. So we aim to bring in the field a new method to apply effective learning. In this study, the learning success of the Motion Notation (Laban) is compared with the Traditional Learning Method.

METHODS

In this research; Traditional teaching method "and Motion Notation (Laban) were examined in terms of learning success. The study was conducted with students who did not know anything about Harmandalı Dance and Motion Notation (Laban)¹.

In the first part of the 14-week study period, the symbols for the Laban group were introduced, while the reading was taught; the motifs of our dances have been reinforced by dictation and deciphering. I was taught to traditional group by making available in our dances and taught by practicing departmental structures. The trainings were also reinforced by assignments and intermediate levels of learning were determined. After 7 weeks of basic training, all teaching and listening sessions were recorded with the camera. There were 14 students in each group, 8 female (57.1%), 6 male

¹ Harmandalı Dance is a kind of Turkish Traditional Dance which plays in espesially Aegean Region. View Ali Haydar Avcı, Zeybeklik ve Zeybeklik Tarihi, E yayıncılık, 2004.

Table 1. Score ranges used in interpreting the score averages.

Weighted score	Score range
1	1.00- 1.79
2	1.80- 2.59
3	2.60- 3.39
4	3.40- 4.19
5	4.20- 5.00
	1 2 3 4

(42.9%) in the Traditional group; and 6 female (42.9%) and 8 male (57.1%) in the Laban group.

In the study, "final test control group model" was used as the real test models (Karasar, 2000, p. 98). The Harmandalı Dance was chosen because it contained clearer expressions in terms of parts, the metronome was heavier, and its measurement and evaluation were decisive.

The level of learning and implementation success of each group was made by a referee delegation of four people who served as referees in the Turkish Folk Dance Federation and were qualified in the field. At the beginning of the interview sessions, the Movement Notation (Laban) was briefly introduced to the referees, the aim of the study was mentioned, and the evaluation form was introduced. In the Evaluation Form, the Harmandali Dance was divided into four sections; each section was assigned a number. The sections are mentioned by numbers 1, 2, 3 and 4. Each section was formed in nine stages according to the time of the game itself. Each box was preceded by a section description, followed by a rating number of up to five. For each section correctly done, referees were asked to score objectively according to skill level.

The normality test was performed to determine the statistical technique to be used in the analysis of the data. The "Shapiro-Wilk" normality test was applied because the number of data in the survey was 28. In the analysis made, the "Sig." Value of the "Shapiro-Wilk" test was higher than 0.09> 0.05, it was found that the data are in normal distribution. Therefore, parametric analyzes were used in the research.

In the analysis of the sub-problems, t-test was applied from the descriptive statistics to the arithmetic average and standard deviation, from the point average to the non-grouped sample (independent groups) at 0.05 significance level and to the sample (dependent groups). Interpretation of the mean scores obtained was based on the weighted scores and the range of points in Table 1. All statistical operations were done with SPSS 20.00 package program.

Study group

This study was conducted with students who are enrolled in the first and second grade of the Turkish Folk Dance Department of the State Conservatory of the University of Sakarya between 18-22 age groups (Table 2). They had similar levels of perception.

Analysis of data

The data obtained from the study were transferred to the computer and analyzed by using SPSS 20.00 package program.

Groups' information was gathered with "Information form". A four-person referee delegation consisting of persons who have served as referees in the Turkish Folk Dance Federation and graduated from the Turkish Folk Dances has been formed in order to conduct individual and team assessments of both methods. First of all, the movement note system (Laban) system was introduced, and then

Table 2. Study group.

Groups	Gender	F	%
	Female	8	57.1
Motion notation (Laban)	Male	6	42.9
	Total	14	100.0
	Female	6	42.9
Traditional	Male	8	57.1
	Total	14	100.0

the evaluation form was introduced. In the evaluation form, the Harmandalı Dance was divided into four sections, each consisting of eighteen parts. For section identification, grading numbers and boxes of 1 to 5 were placed. The judges were asked to score according to skill (accuracy) level for each section. Each of the quartets displayed by a player rated fourteen referees in eighteen pieces, and the average of these scores constituted the score for that section.

The "Shapiro-Wilk" normality test was applied because the number of data in the survey was 28. In the analysis made, the "Sig." Value of the "Shapiro-Wilk" test was higher than 0.09>0.05, it was found that the data are in normal distribution. Therefore, parametric analyzes were used in the study. In the analysis of the sub-problems, t-test was applied from the descriptive statistics to the arithmetic average and standard deviation, from the point average to the non-grouped sample (independent groups) at 0.05 significance level and to the sample (dependent groups).

FINDINGS AND INTERPRETATION

Findings of the study were handled as 1) Average of individual learning achievements 2) Evaluation of team scores.

Laban and Traditional Group members' learning achievement levels

Level of individual learning success of Laban Group

Table 3 showed individual learning success average scores of Laban group, Section I \overline{X} =4.57, Section II \overline{X} =4.53, III. \overline{X} =4.54 IV. \overline{X} =4.37 at the very good level. The average of four sections is at the level of very good with \overline{X} =4.50. The highest success score of the individuals according to their score belonging to student number 11 with \overline{X} =4.68; whereas the lowest score average belongs to student number 1 with \overline{X} =4.34.

Level of individual learning success of Traditional Group

Table 4 revealed individual learning success average

Table 3. Level of individual learning success of Laban Group.

	n i		Movement notation (Laban) individual learning success levels													
В	B.İ.	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	G.O.
I.B.	Χ	4.48	4.4	4.59	4.29	4.65	4.59	4.68	4.43	4.66	4.58	4.84	4.7	4.68	4.38	4.57
I.D.	SS	0.5	0.54	0.49	0.77	0.47	0.57	0.46	0.74	0.53	0.57	0.36	0.45	0.46	0.7	0.31
	Χ	4.22	4.68	4.38	4.34	4.44	4.7	4.79	4.51	4.66	4.3	4.65	4.52	4.73	4.47	4.53
II.B.	SS	0.82	0.49	0.76	0.85	0.57	0.45	0.4	0.69	0.6	0.84	0.5	0.6	0.47	0.75	0.32
шъ	Х	4.3	4.7	4.4	4.7	4.7	4.5	4.4	4.5	4.4	4.5	4.6	4.6	4.5	4.6	4.54
III.B.	SS	0.64	0.55	0.55	0.46	0.62	0.6	0.68	0.64	0.6	0.67	0.6	0.5	0.6	0.6	0.38
	Х	4.34	4.26	3.98	4.44	4.38	4.34	4.58	4.41	4.45	4.38	4.6	4.4	4.3	4.3	4.37
IV.B.	ss	0.58	0.71	0.95	0.66	0.7	0.73	0.59	0.7	0.73	0.76	0.5	0.6	8.0	8.0	0.51
	Х	4.34	4.5	4.35	4.44	4.53	4.53	4.61	4.46	4.55	4.44	4.7	4.6	4.6	4.4	4.5
Total	SS	0.65	0.6	0.74	0.72	0.61	0.61	0.56	0.69	0.62	0.72	0.5	0.6	0.6	0.7	0.39

Table 4. Level of individual learning success of Traditional Group.

			Traditional individual learning success levels													
В		G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G.O.
LB	Х	4.11	4.16	4.09	3.93	4.34	4.27	4.38	4.04	4.18	4.05	4.36	4.3	4.31	4.34	4.2
I.B.	SS	0.64	0.67	0.69	0.67	0.63	0.71	0.57	0.61	0.65	0.74	0.67	0.61	0.66	0.71	0.45
II.B.	Х	3.81	4.36	3.98	3.95	4.25	4.38	4.5	4	4.43	3.84	4.13	4.25	4.52	4.45	4.2
II.D.	SS	0.79	0.69	0.75	0.77	0.57	0.64	0.58	0.85	0.64	0.74	0.69	0.68	0.6	0.69	0.43
шъ	Х	4	4.41	4.08	4.55	4.47	4.3	4.33	4.41	4.29	4.15	4.44	4.63	4.34	4.3	4.34
III.B.	SS	0.67	0.62	0.68	0.5	0.73	0.68	0.71	0.49	0.7	0.68	0.72	0.48	0.71	0.68	0.42
	Х	4.01	4.4	3.76	4.22	4.27	4.37	4.36	4.11	4.38	4.04	4.08	4.55	4.48	4.45	4.25
IV.B.	SS	0.89	0.66	0.83	0.73	0.65	0.59	0.82	0.86	0.68	0.77	0.88	0.57	0.64	0.6	0.5
	х	3.98	4.33	3.98	4.16	4.33	4.33	4.39	4.14	4.32	4.02	4.25	4.43	4.42	4.39	4.25
Total	SS	0.76	0.66	0.75	0.72	0.65	0.65	0.68	0.74	0.67	0.74	0.76	0.61	0.66	0.67	0.45

scores of Traditional group, Sections I and II X=4.20; Section III X=4.34; For Section 4, the group score average is X=4.25. Sections I and II are in the lower limit of very good level, while Sections III and IV are at very good level. In individual learning success, student number 1 has the highest level with X=4.43 and student number 3 has the lowest level with X=3.98.

According to the results of the unrelated sample t test for the comparisons between the Laban group and the traditional groups in the divisional care that make up the harmonious game (Table 5), when the individual learning scores are compared for Sections; Section 1 (t(26)=6.457,

p<0.05), Section II ($t_{(26)}$ =3.997, p<0.05) and Section III ($t_{(26)}$ =3.475, p<0.05) results were significant differences in favor of Laban group in all three sections. No significant difference was seen between Laban and Traditional method for the learning of Section IV ($t_{(26)}$ =1.645, p>0.05). It is understood that the individual learning success is a significant difference in favor of the Laban group as a whole ($t_{(26)}$ =4.950, p<0.05) in the entire game as a whole.

Laban and Traditional Groups' team learning achievement levels

Section I, score average of Laban group X=4.91, score

Sections	Groups	N	Х	SS	sd	t	<u>р</u>	
Section I	Laban	14	4.57	0.15	26	6.457	0.00*	
	Traditional	14	4.2	0.14				
Section II	Laban	14	4.53	0.17	26	3.997	0.00*	
	Traditional	14	4.2	0.24				
Section III	Laban	14	4.53	0.11	26	3.475	0.00*	
3 000	Traditional	14	4.34	0.17		0.110	0.00	
Section IV	Laban	14	4.37	0.14	26	1.645	0.56	
Section iv	Traditional	14	4.25	0.21	20	1.043	0.50	
Camaral	Laban	14	4.5	0.09	200	4.05	0.00*	
General	Traditional	14	4.25	0.16	26	4.95	0.00*	

Table 5. Comparison of individual learning success of Laban and Traditional Groups t-test.

Table 6. Laban and Traditional Groups' team learning achievement levels.

	н	Harmandalı Game											
Groups		I.B.		II.B.		III. B.		IV. B.		Total			
		X	ss	Х	ss	Х	ss	Х	ss	X	ss		
Laban	4	4.91	0.05	4.65	0.05	4.77	0.09	4.69	0.22	4.76	0.08		
Traditional	4	4.59	0.25	4.44	0.14	4.51	0.25	4.5	0.28	4.51	0.11		
Total	8	4.75	0.24	4.54	0.14	4.64	0.22	4.59	0.26	4.63	0.16		

average of Traditional group \overline{X} =4.59; Section II, score average of Laban group \overline{X} =4.65, score average of Traditional group \overline{X} =4.44; Section III, score average of Laban group \overline{X} =4.77, score average of Traditional group \overline{X} =4.51; Section IV, score average of Laban group \overline{X} =4.50; Without considering the section difference of groups, the score average of Laban group in general total (\overline{X} =4.76) is higher than score average of Traditional group (\overline{X} =4.51) (Table 6).

Team assessment independent groups between Laban and traditional method learning success t test results

According to the team assessment in Table 7, the average score of the Laban group is higher than that of the Traditional group. Section I ($t_{(6)}$ =2.46, p<0.05), Section II ($t_{(6)}$ =2.72, p<0.05), In section III; (T (6) = 1.93, p<0.05) and the general evaluation without regard to the

division (t (6) = 3.39, p <0.05) were found to be significant in favor of the Laban group. The difference between the two methods is not significant in Section IV (t (6) = 1.07, p>0.05), although the average score of the Laban group in the department is high.

Comparing the Laban Group's in-group learning success by gender: According to gender in the Laban group III; there was a significant difference between the female and male scores in the section for women (t (12) = 4.136, p<0.05) (Table 8).

Comparing the Traditional Group's in-group learning success by gender: According to gender of traditional group, Section I ($t_{(12)}$ =1.669, p<0.05), Section II ($t_{(12)}$ =2.741, p<0.05), Section II ($t_{(12)}$ =2.367, p<0.05), Section IV ($t_{(12)}$ =3.856, p<0.05). In general, significant differences in favor of males was found at the level ($t_{(12)}$ =3.767, p<0.05) (Table 9).

DISCUSSION

In the evaluation of the Teams I, II and III, Significant differences is found in the sections in favor of Laban

^{*}p<0.05.

Table 7. Laban and Traditional Groups comparison of team evaluation t-test results.

Section	Groups	Н	Х	ss	sd	t	Р	
Section I	Laban	4	4.91	0.05	6	2.46	0.02*	
Section	Traditional	4	4.59	0.25	0	2.40	0.02"	
Cootion II	Laban	4	4.65	0.05	6	0.70	0.03*	
Section II	Traditional	4 4.44 0.14	6	2.72	0.03			
Section III	Laban	4	4.77	0.09		4.00	0.04*	
Section III	Traditional	4	4.51	0.25	6	1.93	0.04*	
Cootion IV	Laban	4	4.69	0.22		4.07	0.46	
Section IV	Traditional	4	4.5	0.28	6	1.07	0.16	
0	Laban	4	4.76	0.08	C	2.20	0.00*	
General	Traditional	4	4.51	0.11	6	3.39	0.02*	

^{*}p<0.05.

 Table 8. Individual achievement levels of the Laban Group according to gender t test.

Section	Gender	N	Х	ss	sd	Т	Р
Section I	Female Male	8 6	4.54 4.61	0.18 0.08	12	-0.812	0.21
Section II	Female Male	8 6	4.54 4.51	0.12 0.24	12	0.269	0.39
Section III	Female Male	8 6	4.6 4.43	0.07 0.08	12	4.136	0.00*
Section IV	Female Male	8 6	4.4 4.33	0.1 0.2	12	0.699	0.25
General	Female Male	8 6	4.52 4.47	0.08 0.11	12	0.859	0.21

^{*}p<0.05.

 Table 9. Individual achievement levels of the Traditional Group according to gender t test.

Section	Gender	N	Х	Ss	sd	Т	Р
Section I	Female Male	6 8	4.14 4.26	0.11 0.14	12	-1.669	0.04*
Section II	Female Male	6 8	4.03 4.33	0.22 0.18	12	-2.741	0.01*
Section II	Female Male	6 8	4.23 4.42	0.18 0.12	12	-2.367	0.02*
Section IV	Female Male	6 8	4.08 4.39	0.18 0.11	12	3.856	0.00*
General	Female Male	6 8	4.12 4.35	0.14 0.08	12	3.767	0.00*

^{*}p<0.05.

method (P <0.05). However, for section IV, the difference between the two methods is not significant. From here, it can be interpreted that the learners can read through a single note with the Laban Method, the nuances of the parts can reach the repetitive student with the same content and quality, and the teacher's dependency for the repetition is removed. Due to the displacement nature of the division, it has been concluded that the equilibrium in shifting affects both groups in a similar way. As can be seen in the meaningful differences that have been described, literacy and accessibility to the same content and quality of repetition demonstrate that Laban can provide an inspection and discipline in itself according to the traditional method. From here it can be reached as a result of supporting the perceptive values of the learners.

In terms of gender in the learners with the Laban method, in section III, there is a learning success in favor of the women and in the part of the traditional method learning in favor of the men in all the departments. It is important that the difference in learning method in both learning methods is not understood from where it originated but the difference is less in the Laban group so that the difference of the method is minimized.

In this study comparing the individual and group learning achievements of the Laban and Traditional teaching methods, Harmandalı Dance consisting of four parts was used. There was a significant difference between the groups in favor of Laban (P <0.05), as averages of individual learning achievement, between the sections and the whole of the harmonized game. From this, it can be said that the method of lane motion notation teaching has more accurate and more adequate learning in terms of learners according to the traditional teaching method. This result also means the ease of teaching at the same time. In fact, although there are some forms of movement between the sections and the characters, the fact that there is a significant difference in all the parts is another statement that the Laban method performs the correct learning. With a similar study, Fügedi (2003, p. 406) revealed that, "dance notation was proved to be an es tablished tool for dance research and dance education in understanding and analyzing movement. This theorem is especially valid in cases where -the structure of dance is amorphous - the units of movement sequences differ from that of accompanying music - the tempo of the dance is high".

Laban is a tool that removes teacher dependency, especially in the teaching of folk dances and all kinds of movements. A student can see and repeat a movement in the same way as the student needs it.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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