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Status of the Usage of Active Learning and Teaching Method and Techniques by Social Studies Teachers

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Abstract The purpose of this study was to determine the active learning and teaching methods and techniques which are employed by the social studies teachers working in state schools of Turkey. This usage status was assessed using different variables. This was a case study, wherein the research was limited to 241 social studies teachers. These teachers were randomly selected from various regions of Turkey during the 2014-2015 fall and spring period. 'Active learning method and techniques scale' was used by the researchers as the data collection tool. The reliability and validity of the scale were tested before applying to the participants of study. Cronbach's Alpha reliability coefficient was calculated as 0.88. Seventy-four articles of the scale consisted of 82 articles. These articles included eight questions related to the occupational and demographic specifications of the participants and five Likert type questions for the active learning method and technical knowledge. The data were analyzed by one-way analysis of variance (ANOVA), independent t-test and post hoc Tukey's test, using the SPSS 18.00 packaged program. Findings shows that project, concept map, finding reason – result, teaching through invention are the most frequently used techniques. Findings in this study point towards differences in the usage status of active learning-teaching methods among the social studies teachers. These differences are not based on the educational background of the teachers or their graduation institute, but on the gender, international experiences, in-service participation for occupation development, occupational seniority, and status and geographic location of the school where the teachers were employed.

Keywords Social Information, Active Learning and Teaching, Method and Techniques

1. Introduction

Students participate in the process and students participate when they are doing something besides passively listening in active learning (1). Being active in/out classroom is considered to have a huge impact on the development and learning psychology of the secondary school students. However, the activity conditions of the students can be transformed and made stable by enhancing the permanency and efficiency of the learning-teaching process through active learning methods and techniques [18]. In this context, an effective guidance system is critical for producing an appropriate learning behavior among students. Therefore, the learning-teaching process, which is closely related to process management method [29], must be effectively employed to achieve this behavioral outcome.

Several studies have attempted to determine the most appropriate style for individuals in the learning and teaching process, and one of the most prominent studies in this domain was conducted by Kolb [23]. As per Kolb's learning model, four factors determine the learning style of individuals. It includes concrete experience, reflective observation, abstract conceptualization, and active experimentation. Different routes are used to achieve the desired learning outcomes through each of these styles. Concrete experience is based on feelings that can be achieved through active engagement in assigned tasks; abstract conceptualization relates to interpretative analysis; active experimentation revolves around practical application of teachings; and reflective observation revolves around reflection and feedback [2]. According to Kolb, these learning styles are combined with four components like assimilation, sortation, changing, and implanting [20, 15,19].

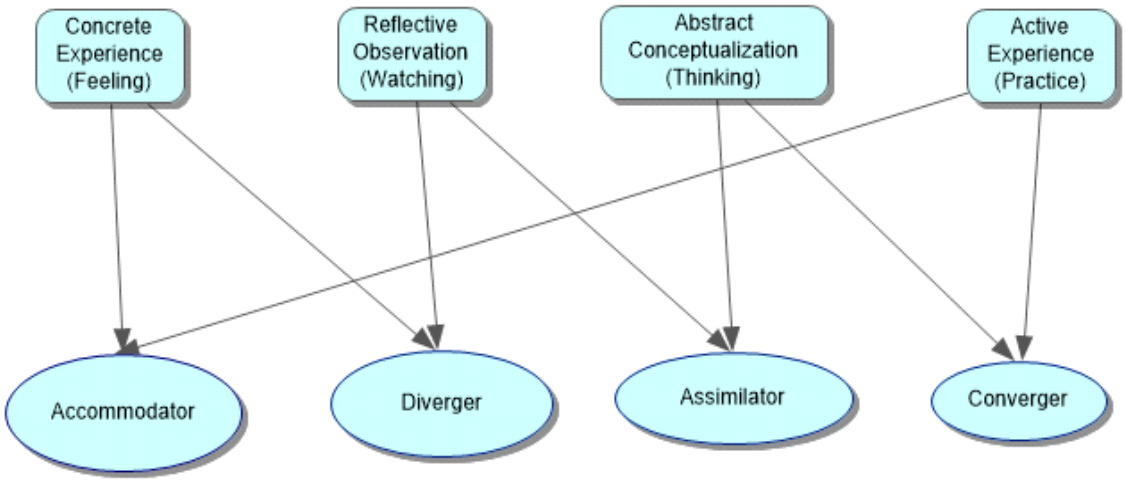

Figure 1. Learning model of Kolb

As seen on the figure 1. concrete experience, reflective observation, abstract conceptualization and active experience are the cornerstones of the Kolb's model. Kolb's model [23] plays a major influencing role in the process of determining methods and techniques for the teacher and learner in the learning process. This determination helps individuals for determining their occupation, approach towards problems, and learning or teaching objectives. In addition to this, it enables individuals to understand their weak and strong aspects [2].

The learning and teaching process includes subject, object, method, and environmental relations. In this process, these components are intricately interrelated to each other and the whole system [7]. In this context, it is important to balance the integrity of each component to make the entire process effective. For example, while possessing sufficient field knowledge, insufficient pedagogic knowledge of a teacher might lead to an inefficient transfer of learning. Therefore, the teaching will be deemed as unproductive [1].

A 21st century's teacher cannot meet requirements of students by delivering knowledge and evaluating students within the boundaries of curriculum. Today's teacher must be a good guide, observer, manager and a qualified person, with a capacity to organize the teaching-learning processes in a way that allows for active engagement of the learner. It implies that qualifications and efficiency demanded in the teaching occupation has increased exponentially in the current scenario [17]. Therefore, it is important to regulate the courses for steering the students toward knowledge, instead of directly transferring the knowledge, and employ different method-technique and approaches for achieving this learning outcome. However, several studies point that many teachers do not have sufficient knowledge about the different methods and techniques that can increase participation of the students in the courses [19].

As indicated earlier, it is important to develop certain competencies in students. These competencies include application of acquired knowledge and skills, assuming responsibilities, communication and team work [12]. These competencies can be achieved by selecting and applying appropriate methods aiming active learning, which are currently lacking in most of the 21st century teachers [27]. The research conducted by Özabacı & Acat [29] emphasizes that teachers must place informative specification (transferring information through the used methods) as the uppermost specification, while placing intellect and wisdom as the sixth specification in their list of qualifications. However, teachers revealed their lack of informing specification, in a recent study [23].

The results gained from the research show that mere wisdom is insufficient for transferring knowledge to learners. The practitioners of any program are teachers, and hence the contents and objects of the program should be prepared with care. With regards to the interaction between the components of a program and learning-teaching process, in particular, the impact of a teacher over the entire process is considered to be more powerful than other components [11]. In other words, even if a curriculum is well-prepared, the desired result cannot be achieved with under qualified teachers [32,11]. It implies that the quality of education is directly related with the qualification of the teacher [22]. Therefore, teachers must learn and adopt new programs and act in accordance with their roles for improving efficiency of programs.

The students learn by talking, applying, observing, discussing, measuring and classifying. Therefore, it is very important to provide a learning environment to the students, wherein they can create their own concepts. Students must actively participate in the learning process and assume responsibility of their learning outcomes in order to create their own concepts (1) The structuring approach and active learning are two concepts, which have close relationship with each other. Active learning is qualified as, *"...a learning process where the learner undertakes the responsibility of his own learning in learning process, gives the learner the opportunity to take decisions related with the various aspects of the learning process and to make self-regulation, where the learners have problems in using their mental abilities with complex educational studies during learning."* Active learning aims to equip students with skills to think, search, produce, solve problems, and think critically

by preventing rote learning [10,4,16,6]. Active learning includes students in the entire teaching-learning process and influences their learning behavior, thereby encouraging learning based on both skill and attitude [8]. Several studies report that the application of active learning strategies, which occur as a result of the reflections of constructivist approaches on the education, facilitate conceptual learning. Conceptual learning, in turn, enables children to develop mindset of lifelong learning, and gain skills that can be used in every field of the life [25].

With regards to the learning strategy designed for the social studies course taught in Turkey, the program provides multiple choices of subjects, skills and activities. This design aims to determine the productivity of a student's learning level. The ability to remember information differs in every learner, and this difference must be considered to determine productive learning levels in each learner [26]. Besides, field knowledge, skills of the teacher, and teacher-student relationship are among the factors that effectively determine the learning level of students. The qualification of the teacher and applied teaching methods must be considered for determining actualization of the learning in social studies course.

In teaching social studies course, question-reply, problem solving, presentation, travel-observation, work and experiment methods are frequently used to achieve learning outcomes [13]. Nearly, all the methods applied in learning and teaching concepts may be considered as valid for social studies course. It is observed that dominant learning styles impact learning processes and occupational life. Therefore, the study aims to determine different teaching styles of social studies teachers. Under the light of these explanations, the study aims to determine these different teaching styles aiming active learning of social studies teachers in terms of various variables.

Social studies teachers are expected to be enthusiastic people, who not only transfer knowledge to students but also establish good communication with the students (34). They teach the students to think, examine, and solve problems. These teachers also provide feedback on research results of students; show confidence on the learning levels of each student; value individual differences, and build confidence and fondness for the course in students; encourage innovations; and above all try to be role models for the students.

1.1. Object of the Research

The study aimed to determine the active learning and teaching methods employed by social studies teachers in Turkey. The study attempted to achieve the stated objective by answering the following question:

1-Which methods are used frequently?

2-Is there a significant difference in usage status of active learning-teaching methods and techniques by social studies teachers in accordance to their genders, educational level, occupational development, experience?

2. Method

2.1. Pattern of the Research

The research was based on the comparative type descriptive survey model from the quantitative research techniques. The data required for descriptive survey model was obtained from individuals in study population, mentioned as the target group of the research. Active learning techniques and methods were used as measuring tools for analyzing the data (5).

2.2. Participants of the Research

A total of 283 social studies teachers participated during the initial stage of the study. These teachers were randomly selected from seven regions of Turkey, during the 2014-2015 academic year, fall and spring semesters. However, 42 teachers were excluded from the analysis for giving wrong and random replies to the questionnaire in scope of the research. As a result, the answers of 241 social studies teachers were included in the analyses. There were 166 (68.9% of total participants) male and 75 female (31.1% of total participants) participants. With regards to the educational status of the participants, 228 (94.6%) of them completed Bachelor's degree and 13 (5.4%) had a Master's degree. Teachers with a doctorate degree or higher education were not part of the study.

Additionally, there were 221 participants (91.7%) from social studies teaching department, seven participants (2.9%) from history department, and 13 participants (5.4%) from history teaching department but all were teaching social studies. During the time of research, 50 participants (20.7%) had 0-1 year of experience, 137 participants (56.8%) had served for 1-5 years, 27 participants (11.2%) possessed 6-10 years of experience, and 27 participants (11.2%) had between 11-15 years of experience. With regards to the type of employment, there were 25 paid teachers (10.4%), 50 intern teachers (20.7%), 139 regular teachers (57.7%), and 27 managers (11.2%). A total of 27 participants (11.2%) worked in villages, 61 participants (25.3%) worked in districts, 146 (60.6%) worked in cities, and seven (2.9%) worked in metropolitans. While 127 (52.6%) participants had earlier taken part in the in-service educational activities, 114 (47.4%) participants had never participated in these activities.

2.3. Data Collection Tools

In this research, "active learning method and technique scale", which was developed by the researcher, was used as the data collection tool. The reliability and validity of the scale were tested before applying the scale-form to the participants. Cronbach's alpha reliability coefficient was calculated as 0.88. Seventy-four articles of the scale consisted of 82 articles. These articles included eight questions related to the occupational and demographic

specifications of the participants and five-point Likert type questions for the active learning method and technical knowledge. The five-point Likert scale included: "I do not know at all, I know a little and I never applied, I know and I sometimes apply, I know, and I frequently apply." The participants choose a number, ranging from 1-5, on this scale.

2.4. Analysis of the Data

Unilateral variance analysis (one-way ANOVA), independent t-test and post hoc Tukey's test were employed to analyze the data, using the SPSS 18.00 packaged software. Besides, the descriptive statistical values of the active learning methods and techniques (see, annex 1) were also calculated.

3. Findings

Table 1. Independent t-test analysis results according to the gender variable of social studies teachers

Gender	N	Mean	Ss	F	t	df	p
Male	166	209.1446	32.53833	.887	–1.988	132	0.042
Female	75	218.6800	35.46188		–2.048	239	

The findings focus on t-test analyses of the usage status of alternative methods and techniques of the teachers, which were conducted according to gender variable, international experiences, and seminar participation based on the occupational experience. The ANOVA test analyses were made according to education level, graduated department, length of service, status in school, and geographical location of the school. Independent t-test analysis results according to gender variable are given in Table 1.

Table 1 shows a significant difference in favor of the females, according to the gender variable ($p<0.05$). In other words, females use the active learning techniques and methods more than the males. Independent t-test analysis results according to abroad experiences are given in Table 2.

The examination of Table 2 shows a significant outcome in favor of the teachers with international experiences, according to the international experience variable ($p<0.05$). In other words, the teachers with international experiences use the active learning techniques and methods more than teachers without international experience. Independent t-test analysis results according to the teachers' seminar participation related with their occupational experience are given in Table 3.

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Table 2. Independent t-test analysis results according to abroad experience of social studies teachers

Abroad experience status	N	Mean	ss	F	t	df	p
Yes	21	239.0000	2.83324	6.175	1.860	121	0.000
No	220	210.1429	17.26645		10.185	118.000	

Table 3. Independent t-test analysis results of the social studies teachers according to participation to the seminar related with the occupational experience

According to participation to the seminar	N	Mean	Ss	F	t	df	p
Yes	127	216.7087	33.17584		2.206	235	0.029
No	114	207.0273	34.28040	.717	2.201		

Table 4. ANOVA results showing the active learning and method usage according to the education level of social studies teachers

Graduated degree	N	Mean	Ss	Chi-square	df	f	p
Bachelor	228	211.4342	34.52038				
Master	13	224.0000	.00000				
Total	241	212.1120	33.69273				
Between Groups				1941.962	1	1.716	.191
Among Groups				270506.013	239		
Total				272447.975	240		

Table 5. ANOVA results of the social studies teachers according to graduated school

Graduated School	N	Mean	Ss	Chi-square	df	f	p
Social studies	121	210.8190	34.84125				
History	67	230.8571	10.96097				
History Teaching	53	224.0000	25.12355				
Total	241	217.1120	33.69273			2.074	0.128
Among Groups				4666.358	2		
Within Groups				267781.617	238		
Total				272447.975	240		

Table 6. ANOVA results of the social studies teachers for the length of service

Length of service	N	Mean	SS	Chi-square	df	f	p
Between 0-1 Year	50	232.8200	21.45207				
Between 1- 5 Years	137	208.4088	32.35978				
Between 6-10 Years	27	218.1852	29.17327				
Between 11-15 Years	27	186.4815	40.81136				
Total	241	212.1120	33.69273			14.419	0.000
Among groups				42052.671	3		
Within groups				230395.304	237		
Total				272447.975	240		

The examination of Table 3 shows a significant outcome in favor of the teachers who participated in the in-service seminars, according to the participation status of social studies teachers ($p<0.05$). In other words, the teachers who participate in seminars related with their occupations use the active learning techniques and methods more than the teachers who do not. In this case, the importance of active learning methods and techniques, and in-service education course is understood. ANOVA results showing the active learning and method usage according to the education level of teachers are given in Table 4.

The examination of Table 4 does not show significant differences in the comparisons of the ANOVA results according to the education level of social studies teachers ($p<0.05$). Accordingly, it is observed that there is no relation between education level of the social studies teachers and active learning techniques and method usage status. Under normal conditions, active learning techniques should be employed by highly qualified teachers, but no such relation is seen here. ANOVA results of the social studies teachers according to their graduate school are given in Table 5.

The examination of Table 5 does not show significant differences in the social studies teachers according to the graduated department ($p>0.05$). Social studies are carried out by teachers who graduate from science, literature, history department, and history teaching and geography teaching departments. In Table 6, it is examined whether there is a significant difference in the length of service of the social studies teachers.

The examination of Table 6 shows significant differences among the active learning technique and method usage status according to the length of service of the social studies teachers ($p<0.05$). Accordingly, it is seen that the new graduated social studies teachers use the active learning methods and techniques much more than teachers with longer service duration. It is also clear that they are less used among the teachers whose length of service is between 11-15 years. Occupational exhaustion usually accompanies a longer service duration, and is considered to be one of the major handicaps in the teaching profession. Occupational exhaustion is the state of psychological burnout that emerges from job dissatisfaction or stress. In Table 7, ANOVA results of the social studies teachers are recorded according to the status of school in which they work.

Table 7. ANOVA results of the social studies teachers according to their position in the school they work.

Status in school	N	Mean	Ss	Chi-square	df	f	p
Intern teacher	35	201.1600	29.04978				
Regular Teacher	67	220.8200	38.52732				
Manager	139	210.7986	28.50888				
Total	241	212.8889	48.14029			2.097	0.011
Among groups				7046.209	3		
Within groups				265401.766	237		
Total				272447.975	240		

Table 8. ANOVA results of the social studies teachers according to the geographic location of the school

Geographical location	N	Mean	ss	Chi-square	df	f	p
Village	27	184.8519	28.30426				
District	61	219.5246	37.81385				
City	146	212.4178	30.20933				
Metropolitan	7	246.2857	17.76433				
Total	241	212.1120	33.69273			10.367	.000
Among groups				38149.022	3		
Within groups				77792.165	237		
Total				115941.187	240		

The examination of Table 7 shows significant differences between the status of social studies teachers in the schools they work and usage status of active learning methods and techniques ($p<0.05$). Accordingly, it is obvious that regular teachers use the active learning methods and techniques more than the managers and intern teachers. It is observed that the active learning methods and techniques are used sparingly by the managers. This finding brings to the forefront the importance of engaging in educational activities at the managerial level. Table 8 observes whether the social studies teachers use the active learning techniques and methods according to the geographic location of the school.

The examination of Table 8 shows that the ANOVA test results are significantly in favor of the social studies teachers working in municipalities, according to the geographical location of the school ($p<0.05$). Accordingly, it is observed that the teachers working in municipalities use the active learning methods and techniques more than the teacher working in villages, districts, and cities. It is thought that the physical conditions of the schools, student profiles, family profiles, variety of the financial potential, and existence of the social environments might contribute toward this difference.

4. Discussion

In this study, the usage status of active learning-teaching methods and techniques of the social studies teachers are examined in terms of variables like gender, international experiences, in- service participation based on occupation, education level, graduated school, length of service, status in the school where the teacher works, and the location of the school where the teacher works. The examination of the gender variables shows that the females use the active learning and teaching methods more than the males. A study conducted by Aydede & Matyar [3] could not identify significant differences between both genders in the gender variable. They expressed that the males and females display the same tendency while adopting the teaching methods and techniques. Çaycı & Ünal [9] expressed that the learning styles are important variables in terms of gender variable.

It is observed that the social studies teachers who went abroad for gaining occupational experiences use the active learning and teaching techniques and methods more frequently than teachers without international experience. It is observed in various research findings that the teachers who acquire professional skills at an international level tend to create more awareness than the other teachers. Similarly, it is observed that the social studies teachers who participate in the in-service seminars for enhancing their occupational learning use the active learning techniques than the teachers who do not participate in such seminars. These results support the findings of Tekin & Ayas [31] on the in-service education seminar, which was organized by the chemistry teachers of Akçaabat for equipping participants with conceptual learning skills. It is observed that the in-service education course, which is prepared according to the study made by Tekin and his colleagues, equips chemistry teachers with new information and skills related to conceptual understanding and concept teaching methods. In the in-service course on teaching methods and techniques, which was organized by Önen, Saka, Erdem, Uzal & Gürdal [28] for the science, physics, chemistry and biology teachers

working in high school and secondary school, it was observed that the teachers did not have sufficient knowledge of the methods and techniques before in-service course. However, their knowledge on teaching methods and techniques positively developed after completion of the in-service course.

In this study, no relation is found between the active teaching techniques and methods of the social studies teachers and their education level. Under normal conditions, the usage of active learning and teaching methods and techniques is expected to increase with an increase in the education level. However, uneven distribution of the participants and non-existence of any Master's degree in the education field might have contributed towards this condition. Similarly, the graduation school of the social studies teacher does not produce significant difference. In Turkey, differences might be identified among the graduate departments of social studies teachers. Social studies teaching could be undertaken by teachers who graduated from different study streams.

An inverse relationship is observed between the length of the service of the social studies teachers and the methods and techniques employed by these teachers. The findings show that traditional methods are used by teachers with longer length of service. Particularly, the occupational exhaustion situation is mostly seen in the teachers who have been in the service for more than 20 years. It is observed that the teachers who are new in occupation and have shorter service duration use the education methods and techniques. In the study of Erdem, Uzal & Ersoy [14], it is concluded that the level of teachers in using active learning methods and techniques shows differences according to the occupational length of service, graduated educational institution, and levels of competence-efficiency and self-evaluation. However, differences are not seen according to the school type which the teacher works, gender and teaching field. The non-existence of any difference in the length of service might be due to the differentiation in the sampling groups which participate in the research. The differences occurring in this research might be due to participation of high-school teachers who have actively participated in many in-service studies; participation of teachers working in Anatolian Teacher High School through a different exam; and the longer duration of this research.

With regards to the status of schools that employ social studies teachers and its relation with the employment of active teaching methods and techniques, it is observed that regular teachers use the active learning method and techniques more than the managers and intern teachers. A relationship is observed between the geographical location of the school where the teacher works and the active teaching techniques status. Accordingly, it is observed that the social studies teachers working in the municipalities use the active learning and teaching techniques more than the teachers working in districts and villages. The data of Ministry of Education and Turkish Statistical Institute mentions that the academic successes of the students studying in big cities are much more than the success achieved in small cities and villages, and the data mentions about the social and innovative specifications of the teachers working in big cities.

5. Conclusions

The usage status of the active learning-teaching methods and techniques of the social studies teachers differs in terms of the variables like gender, international experiences, in-service experience for occupational development, length of service, status in the school where the teacher works, and the location of the school. However, differences are not observed with regards to the education level and graduation school of teachers.

6. Suggestions

1- Teaching and learning approaches of the teachers should be determined according to other in-service education activities and the precautions required for these activities.

2-The teachers must be encouraged to participate in the domestic and international activities for their professional developments.

3- Precautions must be taken while classifying the difference between the teachers working in rural areas or districts

4- Teachers who changed occupation from teaching to managing and then again joined back as teachers must participate in in-service educational activities.

5- Teachers graduating from social studies departments must only be considered for social studies teaching positions, and the intra-branch transitions must be prevented.

Appendix

Annex 1. Descriptive values of the articles of active teaching method and techniques scale

Method and Techniques	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Brainstorming	241	2,00	5,00	3,5851	,70860	,502
Mental Mapping	241	1,00	4,00	3,0456	,89092	,794
Concept Network	241	2,00	5,00	3,3942	,88401	,781
Concept Map	241	2,00	5,00	3,7012	,98845	,977
Project	241	2,00	5,00	3,7718	,91389	,835
Conference	241	1,00	4,00	2,8506	,49423	,244
Panel	241	2,00	4,00	2,9502	,33790	,114
Open Session	241	2,00	3,00	2,7178	,45099	,203
Kollegyum	241	1,00	4,00	2,8589	,69283	,480
Forum	241	1,00	4,00	2,6515	,67922	,461
Problem Solving	241	2,00	5,00	3,5270	,74743	,559
Sample case examination	241	2,00	5,00	3,5270	,67105	,450
Travel-Observation studies	241	2,00	5,00	3,0041	,71003	,504
Simulation	241	1,00	5,00	2,9627	,83831	,703
Demonstration	241	1,00	5,00	3,3444	1,04963	1,102
Discussion	241	1,00	5,00	3,2075	,96959	,940
Data Scheme Preparation	241	1,00	4,00	1,7427	,83179	,692
Jigsaw Method	241	1,00	4,00	1,9461	1,04143	1,085
Computer aided teaching	241	2,00	5,00	3,3776	,80788	,653
Philipss 66	241	1,00	4,00	1,9751	,97436	,949
Formulization	241	1,00	5,00	2,5311	1,14021	1,300
Fish Bone techniques	241	1,00	4,00	3,2490	,69840	,488
Creative Drama	241	2,00	5,00	3,3071	,91122	,830
Role	241	1,00	5,00	3,3237	1,00986	1,020
Pantomime (silent game)	241	1,00	4,00	2,6432	,89748	,805
Making poem	241	1,00	5,00	2,7220	1,04955	1,102
Making song	241	1,00	5,00	2,5934	1,08041	1,167
Completing story	241	1,00	5,00	2,8838	,94151	,886
Finding title	241	1,00	5,00	3,0871	,96430	,930
Finding slogan	241	1,00	5,00	3,2863	1,15334	1,330
Advertisement preparation	241	1,00	5,00	3,0871	,98143	,963
Picturing	241	1,00	5,00	2,9710	,97638	,953
Court	241	1,00	4,00	2,3444	,90925	,827
Think-Discuss-Share	241	1,00	5,00	3,1867	1,08128	1,169
Newspaper publishing	241	1,00	4,00	2,4315	,96850	,938
Press Meeting	241	1,00	3,00	2,0373	,86762	,753
Analogy (Metaphor)	237	1,00	4,00	2,4726	,80008	,640
Empathy	241	2,00	5,00	3,6556	,81244	,660
Mutual teaching	241	1,00	5,00	3,1203	1,05970	1,123
Teaching through invention	241	2,00	5,00	3,6473	,75006	,563
Finding reason-result	241	2,00	5,00	3,8631	,80747	,652
Making regression	241	1,00	5,00	3,3693	,98770	,976
Reverse Thinking	241	1,00	5,00	2,6017	1,02827	1,057
Thinking Loud	241	1,00	5,00	2,6058	1,09078	1,190

Talking in order (flash)	241	1,00	5,00	2,6680	1,39559	1,948
Teaching someone	241	1,00	5,00	2,8714	1,05872	1,121
Information paper bag	241	1,00	4,00	1,7925	,96959	,940
Interview	241	1,00	4,00	2,7427	1,07248	1,150
Socrates (question- reply method)	241	1,00	5,00	3,4398	1,13170	1,281
Question network	241	1,00	5,00	2,9336	1,10856	1,229
What does it have	241	1,00	5,00	2,6680	1,01949	1,039
Learning by discovering	241	1,00	4,00	3,3610	,76265	,582
Workshop	241	1,00	4,00	2,2448	,88637	,786
FİInd who are you?	241	1,00	4,00	2,4232	,99756	,995
Sand hour	241	1,00	3,00	1,6349	,81104	,658
Station	241	1,00	5,00	2,7635	,82543	,681
Find treasure	241	1,00	4,00	2,1494	,87231	,761
Learning Gallery	241	1,00	3,00	2,2573	,83179	,692
Snowball	241	1,00	4,00	2,8216	,58924	,347
Murmur	241	1,00	4,00	2,8091	,70480	,497
Puzzle	241	1,00	5,00	2,8631	,98844	,977
Bingo	241	1,00	4,00	2,5560	,92081	,848
Aquarium (Internal cycle)	241	1,00	4,00	2,6141	,81933	,671
Year book preparation	241	1,00	4,00	2,4108	,96249	,926
Writing letters	241	1,00	5,00	2,8506	,91884	,844
Summarizing	241	1,00	5,00	3,4025	1,22127	1,491
Evaluation papers	241	1,00	5,00	3,0705	1,07587	1,158
Shared teaching (Synergogy)	241	1,00	5,00	2,8174	1,43173	2,050
Teaching through research	241	2,00	5,00	3,6929	,73393	,539
Hypothesis creation/testing	241	1,00	5,00	3,1203	,85516	,731
Six thinking hats method	241	1,00	5,00	3,1120	,77453	,600
Comparing beginners with masters	241	1,00	4,00	1,9170	,96683	,935
Showing cards/matching	241	1,00	4,00	2,3237	,89618	,803
Keeping course diary/ Keeping Diary	241	1,00	5,00	2,6598	1,06868	1,142

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