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INDEX

Yasemin KIRKGÖZ; İhsan ÜNALDI Coh-Metrix: Introduction and Validation of An Online Tool For Text Analysis
Süleyman AVCI; Tuncay AKINCI; Ayşen BAKİOĞLU Using Real Life Problems For Developing Prospective Teachers' Classroom Management Skills
Mümtaz KARADAĞ; Fatma SADIK
Investigation of Social Studies Teachers' Reflective Thinking Levels in Terms of Socio-Demographic Characteristics (An Example of Şanlıurfa Province)
Soner ULUOCAK A Comparison of Selected Classical Guitar Teaching Methods and A Review of Their Implications For Guitar Education
Duygu ÇETİNGÖZ; Berna CANTÜRK GÜNHAN The Effects of Creative Drama Activities on Social Skills Acquisition of Children Aged Six
Hatice ONURAY EĞİLMEZ Teaching Activities Directed Towards The Beginning Stage in Piano Education: Visualizing, Dramatizing, Associating with Life
Hikmet SÜRMELİ Preservice Science Teachers' Opinions and Ethical Perceptions in Relation to Cloning Studies
Ayten Pinar BAL Teacher Candidates' Point of Views About Portfolio Preparation (Turkey Setting)
Cemal SAKALLI Schillers Rezeption in Der Türkei
Nurten ÖZÇELİK Analyse Comparative Des Erreurs Dues Aux Divergences Syntaxiques Entre L'Anglais et Le Français



COH-METRIX: INTRODUCTION AND VALIDATION OF AN ONLINE TOOL FOR TEXT ANALYSIS

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ABSTRACT

This is a corpus-based study which tries to compare lexical networks of Turkish EFL learners with native speakers of English; it also tries to verify the validity of an online database (cohmetrix), which is used for lexical computations of texts written in English. The lexical computations are performed through 60 indices such as syntax, general word and text formation and referential and semantic aspects. Three different corpora (one learner, two native) were employed to test the tool's ability to differentiate learner texts from native ones. The learner text sets were written by 49 intermediate Turkish students learning English, and the other two text sets were written by two different native groups of speakers of English (100 native speakers in total). A number of statistical testing techniques including Kruskal Wallis and Mann Whitney U-test were used. Some of the indices yielded statistically significant differences between three groups; some of them were able to exclude the learner text sets from the native text sets regardless of average number of words in the texts and the prompts for the essays. The results showed that sentences in the essays written by the Turkish EFL learners lacked lexical cohesion when compared to the sentences produced by the native groups.

Key words: Lexical networks, Coh-metrix, Corpus.

INTRODUCTION

Second language learning and acquisition (SLL/SLA) is an expanding field with newly emerging sub-fields. This domain is, in fact, a multi-disciplinary one which gleans insights and methods from a range of disciplines such as linguistics, sociology, sociolinguistics, psychology, psycholinguistics and education (Ellis & Barkhuizen, 2005:3). Naturally, being multidisciplinary comes with rapid developments, and these developments are, most of the time, on a par with new technology.

In theory, research possibilities in SLA are vast; however, much of SLA research has traditionally focused on describing learner language or learners' *interlanguage*; their sequences of development have been the focal point in these studies (Pica, 2005). Coined by Selinker in 1972, the term interlanguage or learner language could be defined as the interim stage between a learner's native language (L1) and the target language (L2) s/he is trying to learn.

Meara (2002), in a recent review of four books about second language lexical acquisition, highlights some important issues. First of all, he claims that unlike syntax and morphology, lexical development in L2 has been sidelined for years since 1950's, and he goes on to say that

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this is a rediscovery period in terms of L2 lexicon, because studies which were once overlooked now make sense. This situation, in fact, creates a problem because now it is time to fill the gap of a sound L2 lexicon theory.

Lexical errors of language learners are, in fact, global errors (Ellis, 1995; Gass & Selinker, 2008), which means that these errors cause communication breakdowns. The main importance of the current study is that it is an attempt to systematically determine problems concerning Turkish EFL learners' lexical networks; as a matter of fact, this alone is an end itself.

Generally speaking, lexical cohesion in learner language is not a no man's land completely, but more studies are needed about the issue. When we look at the issue with Turkish EFL learners in mind, this time we definitely have a no man's land in front of us. Bearing in mind the lack of studies concerning cohesion in Turkish EFL learners, this study could be regarded as the first attempt to deal with the problem.

THEORETICAL BACKGROUND

The characteristics of learner language have been researched from numerous aspects. With contrastive analysis as a paradigm, this stage has been analyzed for lexical and grammatical errors since 1960's, and to some researchers the assumption was that these errors stemmed from an interference of L1 in L2 acquisition process. Contrastive rhetoric, whereby discourse features of L2 are examined, has also been among the research topics in SLA. The outcomes of these studies have been discussed, analyzed, confirmed or denied by researchers; however, some aspects of learner language have been ignored. Among these aspects, lexical cohesion in learner language is a potentially fruitful one. In language teaching-learning context, trying to deal with *cohesion* in learners' texts is like sailing into uncharted waters; traditionally, it lacks attention (Cook, 1989; Flowerdew, 2009). This lack of attention seems to be noteworthy, as the use of lexical cohesive ties has been reported to be a significant differentiating factor between native and non-native speaker writing (Connor, 1984).

If significant differences exist between L1 and L2 written productions, in order to be able to make intelligent differences about adopting and/or adapting L1 practices, ESL practitioners need to have a clear understanding of these differences (Silva, 1993). In order to develop a clear understanding of the nature of L2 writing, in his seminal meta-analysis, Silva (1993) screened and analyzed 72 empirical reports involving a direct comparison of L1 and L2 written productions. The subjects in his study came from different language backgrounds involving L1s like Arabic, Chinese, Japanese and Spanish. They were predominantly undergraduate students in their late teens or early twenties with fairly advanced English proficiency levels. The reports involving these subjects were compared in terms of fluency, accuracy, quality, structure, morphosyntactic/stylistic and lexicosemantic features. The results suggested that, in general, adult L2 writing is distinct from and less effective than L1 writing. L2 composing appears to be more constrained, more difficult and less effective. L2 writers appeared to be doing less planning and having problems with setting goals, generating and organizing materials. Their transcribing was more laborious, less fluent, and less productive. Reviewing, rereading and reflecting were less, but they revised more. Naturally, they were less fluent and less accurate. In terms of lower level linguistic concerns, L2 writers' texts were stylistically distinct and simpler in structure. Their sentences included more but shorter T-units, fewer but longer clauses, more coordination, less subordination, less noun modification, and less passivization. One important point was about the use of cohesive devices. They used more conjunctive and fewer lexical ties, and exhibited less lexical control, variety, and sophistication.

Another similar and important study was carried out by Ferris (1994). A corpus of 160 texts was analyzed. There were 40 texts each by students from four L1 groups: Arabic, Chinese, Japanese and Spanish. The papers were from a university placement exam in which they were asked to write about culture shock. 62 quantitative, lexical and syntactic features of the text were identified and counted in the corpus. For the purpose of statistical analysis, some of these features were either dropped or combined and 28 of them were left. Some of these features were number of words, impersonal pronouns, modals, negation, coordination, coherence features and repetition. The groups were divided into two; one of which consisted of learners at lower level of proficiency in English and the other consisted of advanced learners of English. A discriminant analysis was performed to see how the mentioned variables would discriminate the two groups. The results revealed that students at higher levels of L2 proficiency used a variety of lexical choices, syntactic constructions, and cohesive devices, and their texts received higher holistic scores. The study also showed that micro-level attention and instruction might be of more significance than many practitioners realized.

Hinkel (2002) carried out a large scale empirical analysis of 68 lexical, syntactic and rhetorical features of L2 text. The corpus included texts written by advanced learners of English from six different languages: Arabic, Chinese, Indonesian, Japanese, Korean and Vietnamese. According to Hinkel, even after years of study in English, the learners still lack some aspects that native speakers have. The results of her study indicate that L2 writers have a severely limited lexical and syntactic repertoire. This led the learners to produce simplistic texts, which are rooted in conversational discourse in English language. The results reveal that there appears to be a big gap between L1 and L2 texts in terms of basic academic writing, which requires alternative methodologies in pedagogical applications in teaching writing. Hinkel (2002:74) listed the features with significantly higher median frequency rates in native speaker (NS) and nonnative speaker (NNS) texts as follows:

- Interpretive nouns
- Vague nouns
- Assertive pronouns
- Public verbs
- Private verbs
- Expecting/tentative verbs
- Modal verbs of necessity
- Be as a main verb
- Predicative Adjectives
- Amplifiers
- Other adverbs (manner, conjunct, and adjective/verb modifiers)
- Adverb clauses of cause
- Phrase-level conjunctions
- Sentence-level conjunctions (transitions)
- Exemplification markers (for example)
- Emphatics

With the expansion of digital text analysis techniques, tools and methods, it is now possible to convert any text written in English into numerical values for analysis, and coh-metrix is one of these digital tools. The online database coh-metrix was first introduced by a team of researchers' study (Graesser et. al., 2004) where the indices were detailed, and one of the

indices in coh-metrix tool, LSA, was tested to explore how it can be used as a method to examine lexical development of L2 speakers. The aim of the study was to see if LSA measures of semantic co-referentiality increases as learners study an L2, and to investigate whether a common measurement of lexical proficiency demonstrates growth, as well. A group of L2 English learners who were enrolled in an intensive language learning program at a state university in the United States were involved in the study. Their lexical growth was tracked by making use of LSA over a long period of time. The participants were at the lowest proficiency level at the beginning. A spoken corpus was formed through interviews over one year. The data collected in the 2nd, 4th, 16th, 32nd, 50th and 52nd weeks were computed. Through statistical analysis, the results revealed that the values computed in the last meeting (52nd week) were statistically significant from those of the first meeting. It was concluded that, in time, subjects' proficiency levels increased in terms of the lexical relations in their utterances.

By making use of the indices in coh-metrix, in a recent and comprehensive study Crossley and McNamara (2009) explored how lexical differences, related cohesion and lexical networks, can be used to distinguish between texts written by first language writers of English and second language writers of English. Two corpora were used; one was from LOCNESS (Louvain Corpus of Native English Essays), and the other one comprised essays written by Spanish learners of English taken from the International Corpus of Learners of English (ICLE). The learners' age and their learning contexts were similar: they were all university students in their twenties. The native corpus comprised of 208 texts (151,046 words, in total) and the learner corpus was comprised of 195 essays (124,176 words, in total). Both corpora included argumentative essays whose topics were again taken from ICLE. A discriminant function analysis was conducted; and in the process coh-metrix indices that measure lexical features related to cohesion and lexical networks were selected. The texts were compared in terms of word hypernymy, word polysemy, argument overlap, motion verbs, CELEX written frequency, age of acquisition, locational nouns, LSA givenness, word meaningfulness, and incidence of casual verbs. The results demonstrated that deeper-level lexical indices related to cohesion and network models in coh-metrix tool can significantly distinguish between L1 and L2 texts. The importance of this study is that, as contrast to the related literature (Connor, 1984; Reynolds, 1995, cited in Crossley and McNamara, 2009), it is the first study to distinguish L1 and L2 texts solely based on lexical features.

What is Coh-metrix

Coh-metrix is an online database, which can assess texts in English at multiple levels. While making calculations about texts, it takes into account five indices: readability scores, general word and text information, syntax, referential and semantic aspects and situation model dimensions. Each of these indices is composed of several other indices. From this respect, although some counting is done, coh-metrix is not a word counter in classical terms. It is highly analytical, and singles out every aspect of a text from the others by yielding precise numerical values. As the concern of the study is lexical cohesion in EFL learners' texts, only the referential and semantic aspect scores will be analyzed.

Referential and Semantic Aspects in Coh-metrix

This index focuses on referential cohesion i.e. *Coreference*. Referential cohesion is generally a matter of *overlapping* of constituents within a text. Argument overlaps and stem overlaps between adjacent and distant sentences are taken into account in this index. There are other indices such as anaphor reference and latent semantic analysis.

Anaphor reference index refers to the referential tools i.e. pronouns used in a text. This index measures these referential tools taking adjacent references and references occurring up to five sentences, earlier in a text.

Argument overlap is a proportion ratio score, which calculates the ratio of sentence pairs sharing one or more arguments (*nouns*, *pronouns etc.*).

Stem overlap refers to proportion of adjacent sentences sharing common word stems. For example, in the following sentence;

The students <u>prepared</u> their presentations meticulously. That's why the <u>preparations</u> took weeks.

The words *prepared* and *preparations* share the same stem and in the database it is called a stem overlap.

Another way through which coh-metrix determines similarity is Latent Semantic Analysis (henceforth LSA). LSA, also known as Latent Semantic Indexing or Correspondence Analysis, is a mathematical and statistical technique for representing word knowledge based on a large corpus of texts. It makes use of Singular Value Decomposition (SVD) technique, which could be regarded as a type of *factor analysis* reducing large corpora of texts to much fewer dimensions (See Crossley et al., 2008 for details).

LSA is generally used to put different body of texts into categories. It is not a simplistic word count or co-occurrence estimation, but a deeper (*latent*) level of mathematical analysis of words. This technique is reported to mimic human word sorting (Landauer et. al., 1998).

THE CONTEXT AND THE PROBLEM

The problem of the current study relates to freshman engineering students learning English as a foreign language at the Higher School of Foreign Languages at University of Gaziantep. In this institution, throughout years, language teaching has been modified, modernized and eventually relatively improved. However, lexical cohesion, especially in learners' written productions, is nowhere near adequate. Although discussions concerning the issue go on continuously, let alone trying to come up with feasible solutions, the problems have not been named, yet.

The common view among the teaching staff at this institution is that engineering students do better in grammar subjects, but when it comes to learning and retaining new vocabulary items and using them appropriately, the teaching/learning process falters. This topic is an ongoing one in teachers' rooms. When the learners are asked to talk about their problems they encounter while learning a second language, the very same topic surfaces. When the written productions of these learners are examined, which is done officially during mid-terms and final exams, teachers' observations concerning lexical cohesion are confirmed.

The primary aim of the current study is to determine lexical and cohesive differences between texts written by Turkish EFL learners and texts written by native speakers of English. These differences are expected to shed light onto the lexical and cohesive flaws in learners' texts.

From the theoretical point of view, this study could be regarded as an attempt to answer certain questions, and raise new ones concerning written productions of EFL learners bringing the interlangual lexicon and cohesion in learners' text into the foreground. These questions are,

however, context-bound i.e. they are limited to a certain teaching/learning context. The rationale behind this paradigm is that every learner, every teacher and every teaching/learning context is unique (Brown, 2007); hence, the problems surfacing in any context need to be handled by taking into account the parameters in that same context.

RESEARCH QUESTION

Taking the related literature into account, the following research question is the main concern of this study:

Regardless of prompt or average number of words used in the texts, to what extent do texts written by Turkish EFL learners deviate from texts written by native speakers of English in terms of referential and semantic aspects?

Assumptions and Limitations

It is assumed that individual differences among the subjects participated in the current study, such as socio-economic and cultural backgrounds will not have significant effects on the statistical outcomes.

Computerized analyses of L2 essays in large scale assessments such as the Test of English are reported to have misidentified L2 textual features with an error ratio of 21 % (Frase et al., 1999). The related assumption is that the online tool, coh-metrix, yields reliable measurements concerning both L1 and L2 corpora.

In this study, a collection of texts written by native speakers of English is used as the reference point for comparison with Turkish EFL learners. The assumption, albeit a strong one, concerning this point, is that the reference corpus, collected from native speakers, is flawless in terms of lexicon and grammar, which would mean that the more native-like a text is, the more coherent it is.

As for the limitations, the current study is limited to Turkish EFL learners whose proficiency levels vary from intermediate to advanced. Furthermore, the number of the learners (49) is too limited for broader generalizations.

METHOD

Participants

Initially, the participants were 850 freshman engineering students at a state university in Turkey. Their ages varied from 19 to 23, and most of the participants were male. In order to meet the requirements for a learner corpus (Granger, 2003), subjects' proficiency levels of all 850 students were determined using a valid and reliable placement test (Allen, 1992). The results were checked to see if their levels were homogeneous, as would be expected. However, the results of the test showed that the subjects' levels varied from A2 (elementary) to C2 (advanced) level, which, in our case, demanded adjustments concerning homogeneity. Therefore, only intermediate and upper level subjects (49) were involved in the study. The assumption was that the subjects who have proficiency levels lower than intermediate level would still be dealing with some basic grammar and lexical issues, which was likely to affect the results negatively. From this respect, a purposive sampling was performed.

Corpora

One of the corpora used in this study was an original one, i.e. compiled by the researcher. The texts were written in a writing exam, photocopied the same day, and handed out back to the students the following day. The students were asked to digitalize the texts, and send them back through email. Since the scope of the study was almost entirely lexical, the students were allowed to make spelling corrections in their texts before sending them. They were also asked to fill in a *student profile* for further descriptive analysis.

The selection of corpora was one of the most demanding parts of the current study. The standard view would be the comparison of two different sets of corpora, and then making interpretations about the results. In their studies, Crossley and McNamara (2009) compared two sets of corpora; one native (L1) and the other learner (L2). They concluded that the online database (coh-metrix) they used in their study is able to distinguish between L1 and L2 texts. In this study, another dimension was added to the equation: a third set of L1 texts. Table 1 is a description of the three corpora used in this study.

Table 1. Comparison of the Three Corpora Used in the Study

Name of the Corpora	Total Number of Words	Average Words per Essay	Essay Type	Prompt
Learner corpora (L)	16,334	333	Argumentative	Exam/Timed
Native corpora 1 (N1)	21,605	400	Argumentative	Exam/Timed
Native corpora 2 (N2)	54,397	1182	Argumentative	Untimed

The average number of words for L2 texts is 333, and for the first L1 corpus it is 400 words per text; however, the second native corpus (N2) has an average of 1182 words per text. All three corpora comprised of argumentative essays, and all essay topics were taken from Granger (1993). The rationale for adding another native corpus is that if the mentioned database or software is capable of distinguishing between L1 and L2, then it should not be able to distinguish between two L1 sets of corpora. In order to determine this issue, Kruskal Wallis and Mann Whitnet U-test, one-way ANOVA and Scheffe (post-hoc) tests were conducted with an expectation that the L2 text sets would differ from both L1s.

RESULTS

Normality and Homogeneity of the Data

Since the study involves multiple groups, before beginning to analyze the data, group scores were tested to see if they were suitable for parametric comparisons. It is common knowledge that in order to be able to make use of parametric tests and make inferences regarding their results, the scores gathered from the subjects must be normally distributed. With very large populations normality is generally not a concern. However, if the population is not that large, the assumption that the subjects' scores are distributed equally has to be tested. The next concern about parametric comparisons is the homogeneity of variance of the scores; it is the requirement that the variances should be the same throughout the data. Generally, the data to be used in any study comes from different populations; if the score variances of these groups are homogeneous, then these groups are suitable for parametric comparisons.

In order to test normality and homogeneity of our subjects' scores, frequency measures and Levene's test of homogeneity of variance were performed. The results concerning the three groups, as a whole, (Learner, Native 1 and Native 2) are exhibited in Table 2.

Table 2. Normality and Homogeneity Results for the Three Groups

Name of the index	sd	Skewness	Standard Error	z	Levene test p value
Referential and Semantic Aspects					
Anaphor reference (Adjacent)	,138	,370	,196	1,887	.028**
Anaphor reference	,080,	,935	,196	4,770*	.008**
Argument overlap (Adjacent)	,145	-,412	,196	2,102*	.497
Argument overlap (All)	,133	,516	,196	2,632*	.013**
Adjacent stem overlap	,170	-,131	,196	,668	.032**
Stem overlap (All)	,16	,372	,196	1,897	.032**
LSA sentence adjacent	,057	-,228	,196	1,163	.985
LSA sentence all	,06	,216	,196	1,102	.487

^{*}Values greater than 1.96 are significant at .05 level.

In Table 2, the first column represents the name of the index from coh-metrix. The second column indicates the standard deviation values. Skewness values are indications of how much the score distributions are *skewed* compared to a perfectly distributed one. The z value is the result obtained from the division of Skewness value by the standard error value. If the obtained score from this division is greater than 1.96, which is taken from the normal distribution table, it means that the scores are *not* normally distributed. The last parameter to be checked, Levene's test of homogeneity is given in the last column. This test checks whether the variance of the scores of a given population are homogeneous or not. If these values for a certain index are significant (p<.05), then it can be claimed that the groups are not suitable for parametric comparisons.

A quick glance at Table 2 will make it clear that nearly all of the indices violate either normality or homogeneity assumption, or in some cases both assumptions are violated (e.g. anaphor overlap). However, LSA scores, both adjacent and all-distances, appear to have normal distributions and homogeneous variances.

^{**}Significant at .05 level

Taking all the above analyses into account, as the group scores are not either normally distributed or lack homogeneity, Kruskal Wallis test, a non-parametric test for multiple groups, has been employed in comparison of the three groups. Since the total participants in this part of the study is relatively large (n_{total} =149), Monte-Carlo method has been employed to determine the exact significance values for each of the comparison done by using Kruskal Wallis test. Since we have three groups to compare, a post-hoc test is considered necessary to see which of them will be excluded from the group. At this point, carrying out a post-hoc test is not as easy as it is in parametric tests although it is not a dead-end. Among the options for a post-hoc test for non-parametric analyses, carrying out binary Mann Whitney U-tests for each of the groups is an option. That is, the first, the second and the third group will be compared with each other as 1-2, 1-3, and 2-3. The differences have been examined to see if any of the group scores are significantly different from the others. The catch, at this point, is the liability to Type 1 error, which is believed that there is a genuine effect in our population when, in fact, there is not. To overcome this issue, Bonferroni correction is performed (Field, 2009). This correction method is basically a restriction of the critical value to avoid Type 1 error. This is done by simply dividing the critical value (.05) by the number of the groups involved in the study. For instance, when there are three groups at hand and they are to be compared by making use of non-parametric tests, the critical value changes from .05 to .0167 (.05/3=.0167). The interpretations as to the significance of the outcomes are performed taking .0167 into account as the critical value, not the standard .05.

In the analysis process, referential and semantic comparisons were carried out among the three groups (Learner, Native 1 and Native 2). Kruskal Wallis test and Mann Whitney U-test as the post-hoc test were performed. The results of statistical analyses revealed no significant differences between learner and native texts in the anaphor reference and stem overlap indices. As for the LSA scores, bearing in mind the normality of distribution and the homogeneity of variances (Table 2), one-way ANOVA and Scheffe tests were employed; the results also revealed significant differences among the three groups.

Among the indices mentioned before, the first index from referential and semantic index set to demonstrate significant difference between L1 and L2 texts was the anaphor reference index for adjacent sentences. This index calculates the references occurring in sentences next to each other. Descriptive results for this index are provided in Table 3.

Table 3. Descriptive Results for Anaphor References for Adjacent Sentences

Groups	n	\bar{x}	sd
Learner (L)	49	.401	.138
Native 1 (N1)	54	.310	.142
Native 2 (N2)	46	.299	.104

Descriptive results provided in Table 3 clearly shows that the learner group (L) scored higher (\bar{x}_L =.401) than the other two native groups (\bar{x}_{NI} =.310, \bar{x}_{N2} =.299). To check if this difference is statistically significant, Kruskal Wallis test was conducted. The results are revealed in Table 4.

Table 4. Kruskal Wallis Test Results for Anaphor References for Adjacent Sentences

Group	n	Mean Rank	df	x^2	p	Group Differences
Learner	49	97.47	2	19.841	.000	L>N1&N2
Native 1	54	64.83				
Native 2	46	63				

The results of Kruskal Wallis test for adjacent anaphor reference for sentences for the three groups are displayed in Table 4. The difference among the groups appear to be statistically significant [x^2 (2) = 19.841, p< .05]. Mann Whitney U-test with Bonferroni correction as the post-hoc test reveals that this difference is between the learner and the native groups. This means that the learner group makes use of referential tools much more than the native groups regardless of the number of the words used in the texts.

The next index related to referential aspects is anaphora reference. This index takes into account the references in a given text for up to five sentences earlier. It means that it counts referential incidences backwards, be it in the first adjacent sentence or the fifth sentence backwards. Table 5 provides descriptive results for this index.

Table 5. Descriptive Results for Anaphor References

Groups	n	\bar{x}	sd
Learner (L)	49	.196	.086
Native 1 (N1)	54	.122	.066
Native 2 (N2)	46	.145	.056

Descriptive results for anaphor reference are displayed in Table 5. It is clear from the table that the learner group scores higher (\bar{x}_L =.196) than the native groups (\bar{x}_{NI} =.122, \bar{x}_{N2} =.145). In order to determine if this difference is statistically significant, Kruskal Wallis test was performed and the results are demonstrated in Table 6.

Table 6. Kruskal Wallis test results for Anaphor References

Group	n	Mean Rank	df	x^2	p	Group Differences
Learner	49	102.40	2	29.551	.000	L>N1&N2
Native 1	54	62.94				
Native 2	46	59.98				

The results of Kruskal Wallis test employed for the three groups in terms of anaphor reference are presented in Table 6. The analysis of the results reveals that there is a statistically significant difference among groups [x^2 (2) = 29.551, p< .05]. The results of the post-hoc test

with Bonferroni correction indicates that the there is a statistically significant difference between the learner group and the two native ones. When we refer back to the mean scores displayed in Table 5, it is obvious that the learner group scored higher from both of the native groups (\bar{x}_L =.196, \bar{x}_{NI} = .122, \bar{x}_{N2} = .145). This outcome indicates that in learner texts there is a plethora of references even when compared to texts, which were written by native speakers of English and which have significantly higher averages of words.

The next index in coh-metrix related to referential aspects is the argument overlap for adjacent sentences. This index calculates the overlapping arguments (nouns, verb etc.) in a given text. There are two indices which calculate argument overlaps; one adjacent overlaps and the other all overlaps across the texts. This is a proportion score and the adjacent overlap index yields ratio scores of argument overlaps between adjacent sentences. Descriptive results concerning argument overlaps between adjacent sentences are displayed in Table 7.

 Table 7. Descriptive Results for Argument Overlap for Adjacent Sentences

Groups	n	\bar{x}	sd
Learner (L)	49	.543	.147
Native 1 (N1)	54	.562	.156
Native 2 (N2)	46	.547	.122

Table 7 reveals descriptive results for the adjacent argument overlap scores. The means of the three groups appear to be similar (\bar{x}_L =.543, \bar{x}_{NI} = .562, \bar{x}_{N2} =.547). Kruskal Wallis test was performed to see the statistical difference among the groups and the results as seenn in Table 8.

Table 8. Kruskal Wallis Test Results for Argument Overlap for Adjacent Sentences

Group	n	Mean Rank	df	x^2	p
Learner	49	71.94	2	1.003	.613
Native 1	54	79.68			
Native 2	46	72.77			

Results concerning the adjacent argument overlap scores are shown in Table 8. The analysis of the results indicate that there is statistically no significant difference among the groups $[x^2(2) = 1.003, p > .05]$. This could mean that there is similar amount of adjacent argument overlaps both in the learners and the native texts. These overlaps are, in fact, related to repetitions of nouns, verbs, noun phrases, etc.; therefore, there is nothing surprising about these repetitions appearing in nearly the same amounts in adjacent sentences of all the three groups. The next index, all-distance argument overlap, tests these repetitions across the texts. Descriptive results are revealed in Table 9.

Table 9. Descriptive Results for All-distance Argument Overlap

Groups	n	\bar{x}	sd
Learner (L)	49	.446	.134
Native 1 (N1)	54	.449	.148
Native 2 (N2)	46	.437	.096

Descriptive results exhibited in Table 9 indicate that all-distance argument overlap scores for the three groups are quite similar (\bar{x}_L =.446, \bar{x}_{NI} = .449, \bar{x}_{N2} = .437). To verify this similarity Table 10 should be checked for the results of Kruskal Wallis test.

Table 10. Kruskal Wallis Test Results for All-distance Argument Overlap

Group	n	Mean Rank	df	x^2	p
Learner	49	73.70	2	.125	.941
Native 1	54	76.60			
Native 2	46	75.50			

Kruskal Wallis test scores concerning all-distance argument overlap for the three groups are displayed in Table 10. Again, as in the adjacent overlap scores there seems to be no significant difference among the groups $[x^2 \ (2) = .125, p > .05]$. The similarities among the groups in terms of adjacent and all-distance scores could be regarded quite normal as the subjects were given certain topics to write about and they were required to stick to them. This restriction is likely to be the cause of lexical repetitions, and thus argument overlaps appear between adjacent and distant sentences.

The next index in coh-metrix is related to stem overlaps between adjacent sentences. In this index, parts of speech aspect of lexical items enter the scene. It means that overlapping lexical items with common word roots are taken into account. For example, one sentence might include the word *lose* and the next sentence might include the word *losing* or *lost*. This incidence is counted as an adjacent stem overlap. Descriptive results concerning this index are reported in Table 11.

Table 11. Descriptive Results for Stem Overlap for Adjacent Sentences

Groups	n	\bar{x}	sd
Learner (L)	49	.438	.176
Native 1 (N1)	54	.560	.165
Native 2 (N2)	46	.530	.135

Descriptive results of the three groups concerning adjacent stem overlap are displayed in Table 11. According to these results, the learner group $(\bar{x}_L = .438)$ scored particularly less than the

native ones, whereas the native group scores appear to be quite similar (\bar{x}_{NI} = .560, \bar{x}_{N2} = .530). This exclusion could be confirmed with results presented in the following table.

Table 12. Kruskal Wallis Test Results for Adjacent Stem Overlap

Group	n	Mean Rank	df	x^2	p	Group Differences
Learner	49	57.28	2	13.407	.001	L <n1&n2< th=""></n1&n2<>
Native 1	54	87.84				
Native 2	46	78.80				

The comparison of adjacent stem overlap scores for the three groups is presented in Table 12. The results of the comparison clearly indicate that there is a statistically significant difference among the groups $[x^2 \ (2) = .125, p < .05]$. The results of Bonferroni correction through Mann Whitney U-test makes it clear that this difference is between the learner and the native groups. This difference might be an indication of learners' lack of proficiency in modifying lexical items according to their syntactic requirements. This could also mean that learners' knowledge concerning L2 vocabulary is one-dimensional disregarding parts of speech of the lexical items at their disposal.

All-distance stem overlap is another index used in coh-metrix. In this index, stem overlaps are calculated by taking into consideration the whole text not just adjacent sentences. Descriptive results about this index are given in Table 13.

 Table 13.
 Descriptive Results for All-distance Stem Overlap

Groups	n	$\bar{\mathbf{x}}$	sd
Learner (L)	49	.341	.155
Native 1 (N1)	54	.472	.164
Native 2 (N2)	46	.431	.110

Table 13 exhibits descriptive results for all-distance stem overlap index. Although the native groups appear to have similar mean scores (\bar{x}_{NI} = .472, \bar{x}_{N2} = .431), the learner group stands out from the native groups with a relatively low mean score (\bar{x}_L =.341). The following table verifies that this difference between the learner and the native groups is statistically significant.

Table 14. Kruskal Wallis Test Results for All-distance Stem Overlap

Group	n	Mean Rank	df	x^2	p	Group Differences
Learner	49	54.89	2	16.931	.000	L <n1&n2< th=""></n1&n2<>
Native 1	54	88.98				
Native 2	46	80.01				

Kruskal Wallis test results and binary comparison of the groups through Mann Whitney U-test with Bonferroni correction regarding all-distance stem overlap for the three groups can be checked in Table 14. The results exhibit a definite and statistically significant difference among the three groups $[x^2 \ (2) = 16.931, \ p<.05]$. When this difference is checked through Mann Whitney U-test to see which group was statistically excluded from the others, the scores of the learner group appears to be significantly lower than the scores of the native groups (Table 13). As was mentioned before, this index calculates the stem overlaps across a given text. Since the native groups scored significantly higher than the learner group in both adjacent and all-distance stem overlap indices, it would not be an assumption to say that the learner group lacks the ability and flexibility to make use of different parts of speech of lexical items. This index alone could be regarded as an indication of a disconnection among sentences written by the learner group.

Another index through which coh-metrix measures lexical cohesion is LSA, a statistical technique akin to factor analysis. In this study, two of these indices LSA measures for adjacent sentences and all-distance LSA measures were taken into account; and both of these indices yielded statistically significant differences among the three groups involved in the study. Descriptive results for adjacent LSA scores are detailed in Table 15.

Table 15. Descriptive Results for LSA Scores for Adjacent Sentences

Groups	n	\bar{x}	sd
Learner (L)	49	.185	.056
Native 1 (N1)	54	.230	.053
Native 2 (N2)	46	.233	.049

Descriptive data concerning LSA scores for adjacent sentences for the three groups are displayed in Table 15. Data revealed in Table 15 clearly indicates that the learner group has a lower mean (\bar{x}_L =.185) than both of the native groups (\bar{x}_{NI} =.230, \bar{x}_{N2} =.233).

As mentioned earlier, since the normality of distribution and the homogeneity of variance among LSA group scores were at acceptable levels (see Table 2), a parametric test, one-way ANOVA was employed to see if the observed mean difference among the three groups was statistically significant. One-way ANOVA and post-hoc (Scheffe) test results for adjacent LSA scores are presented in Table 16.

Table 16. One-way ANOVA Results for LSA Scores for Adjacent Sentences

	Sum	of				
	Squares	df	Mean Square	\mathbf{F}	p	Scheffe
Between Groups	.072	2	.036	13.009	.000	L <n1&n2< th=""></n1&n2<>
Within Groups	.406	146	.003			
Total	.479	148				

As can be observed from Table 16, adjacent LSA scores for the groups differ significantly ($F_{(2-146)}$ =13.009, p< .05). In order to determine the nature of this significant difference, a post-hoc test (Scheffe) was performed. The result of this post-hoc test clearly indicates that the learner group scored significantly lower than the native groups (L<N1&N2).

The next parameter in LSA index is all-distance scores which are calculated by taking into account LSA outcomes throughout texts. Descriptive results concerning all-distance LSA scores are presented in Table 17.

Table 17. Descriptive Results for All-distance LSA Scores

Groups	n	\bar{x}	sd
Learner (L)	49	.166	.05
Native 1 (N1)	54	.214	.06
Native 2 (N2)	46	.209	.05

A quick glance at Table 17 makes it clear that the learner group scored lower than the native groups (\bar{x}_L =.166, \bar{x}_{NI} = .214, \bar{x}_{N2} = .209). The significance of this difference is calculated by means of one-way ANOVA and Scheffe test, and the results are presented in Table 18.

Table 18. One-way ANOVA and Scheffe Test Results for All-distance LSA Scores

	Sum of Squares	df	Mean Square	F	p	Scheffe
Between Groups	.07	2	.03	11.067	.00	L <n1&n2< td=""></n1&n2<>
Within Groups	.46	146	.03			
Total	.53	148				

Analysis of all-distance LSA scores indicates that the difference among groups concerning all-distance LSA scores are statistically significant $[F_{(2-146)}=11.067, p<.05]$. Furthermore, Scheffe test result reveals that this difference statistically excludes the learner group from the native ones (L<N1&N2).

Parametric analyses of adjacent and all-distance LSA scores revealed that the learner group scored significantly low compared to both native groups. The noteworthy aspect of these outcomes is that LSA scores, both adjacent and all-distance, are not influenced by the average number of the words per text produced by the three groups. In other words, no matter what the native text lengths are, the learner group obtained significantly lower LSA scores. When the relation of LSA scores with lexical cohesion in texts is taken into consideration, written productions of the learner group can be claimed to be less cohesive compared to both of the native group written productions.

DISCUSSION

The results of the parametric and non-parametric comparisons of texts written by Turkish EFL learners and native speakers of English validated the ability of coh-metrix, an online database for text analysis in differentiating native and non-native written productions.

With regard to the main research question of the study, regardless of average number of words in the texts and prompts (timed or untimed; exam or free writing), there appeared to be statistically significant differences between the native and the learners' text sets. This outcome is important in that no matter how many words are used, or whatever the prompt is, the learners appear to have certain features in common in their writing, which significantly differentiate them from their native counterparts.

The significant differences among groups concerning referential and semantic indices emerged in the anaphor reference, the stem overlap and the LSA indices. All of these indices, in fact, give ideas as to the unity and cohesion in a text. In these indices, learners scored significantly different from the native groups.

The abundance of anaphor references in learners' in both adjacent sentences and all through their texts means that the learner group uses referential tools much more than both of the native groups; and this difference is available regardless of the number of the words used in the texts.

The similarity in argument overlap (nouns, verbs, noun phrases, etc.) scores of the three groups both in adjacent sentences and all across the texts is a sign of repetitions of topic-related lexical items. There seems to be no significant difference between the learner and the native groups at this point.

Group mean values concerning stem overlaps both in adjacent sentences and sentences across texts appeared to be significantly different. This difference could be interpreted as a disconnection among sentences written by the learner group. In addition, learner groups' vocabulary could be regarded as dimensionally limited, as stem overlap index takes into account different parts of speech of lexical items in a given text.

LSA scores also yielded statistically significant results among the three groups; the learner group scores significantly differed from those of the native scores. Apparently, the learner group can not sustain lexical cohesion in their written productions, which is most likely to stem from the lack of lexical proficiency and flexibility in the target language.

The outcomes discussed in the previous section are all in line with the related literature. LSA related outcomes confirm Silva's (1993) findings highlighting weak lexical and semantic ties in learners' written productions. These outcomes also support the findings mentioned in Crossley et. al. (2009) that, in a text, LSA scores are strong indications of lexical relatedness.

Hinkel's (2002) findings stating that even at advanced levels EFL learners have severely limited lexical and syntactic repertoire, are also confirmed in terms of lexical repertoire. The significant differences between the learner and the native groups in terms of stem overlap both in adjacent sentences and all across texts could be counted as an outcome of this severe limitation.

CONCLUSIONS

This study validates an online database used to evaluate texts, both native and learner, at multiple levels. Some indices in this database managed to differentiate between native and learner text sets. Moreover, the same indices were unable distinguish two different native corpora. From a language learning-acquisition point of view, this is important in that it paves the way to the possibility of grading learners' texts digitally, which would solve the problem of subjectivity in language testing and evaluation process.

The study also revealed some problematic areas in learners' texts while some other aspects were reconfirmed. However, without checking it with our subjects' native language writing skills, it is hard to say that these outcomes are universally valid for language learners. That is to say, our subjects might already be *unskilled writers* in their native language trying to survive a foreign language by making do with whatever linguistic repertoire they have at their disposal.

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USING REAL LIFE PROBLEMS FOR DEVELOPING PROSPECTIVE TEACHERS' CLASSROOM MANAGEMENT SKILLS*

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ABSTRACT

The purpose of the present study is to try out an education program designed in accordance with a problem based learning (PBL) approach in a classroom management (CM) lesson and to determine student opinion on the exercise. An action research method was applied in the present research. The exercise was conducted in the fall term of the 2010-2011 academic year. The study group was composed of prospective teachers from six branches of the Atatürk Faculty of Education, Marmara University. For the program design, firstly the topics of the CM lesson were determined and learning goals were created. Then, scenarios including the problems concerning CM were developed. The subjects were learned through the solutions found for these problems. In the research, open-ended questions were used as the data collecting instrument. According to the answers, the prospective teachers found this exercise more useful than other way of presentation since it offered more lasting learning; it offered the opportunity to learn by experience; it was enjoyable and motivating as well as being student oriented. The prospective teachers stated that they learned well the problems presented by the groups and the solutions for them; they felt themselves to be more competent in terms of CM; and they would be able to find solutions should they encounter similar problems in the future. Consequently, it can be said that the PBL approach can be used with the aim of developing CM skills in prospective teachers.

Key Words: Teacher education, Problem based learning, Classroom management

INTRODUCTION

In the CM lesson, prospective teachers are informed about how to organize and control the classroom, classroom materials, student behaviors and teacher behaviors in order to carry out the education basically in an effective way (Bakioğlu, 2009). Prospective teachers are taught how they should deal with the problems in the classroom by means of a theoretical scale. However, there are always events which can affect learning in a negative way as the classroom is a dynamic environment. A teacher should be educated in a way that he/she can deal with these negative events so as to carry out the education efficiently. In the present system, this skill is acquired by trial and error in real classrooms. This situation may possibly cause negative results for both teachers and students. According to Savin-Baden and Howell (2004), this approach enables the individual to begin a professional life as a more competent problem solver by improving his/her problem solving skills. PBL is generally defined as "the strategy of teaching the subjects presented by specific problems which can help the students to understand

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underlying subjects and principles." (Özvarış & Demirel, 2004). The subjects are learned through problems in PBL. The teacher, who has a facilitating role, presents scenarios which include problems and serves as an intermediary to make students learn by means of solving these problems (Schmid & Moust, 2000). The teacher also enables the students to acquire such basic skills as problem solving (Barrows & Tampley, 1980), investigating, and creativity (Tan, Teo & Chye, 2009) by this method.

PBL is used throughout the world in such fields as medicine, pharmacy, nursery, engineering, law, accounting and teacher training (Savin-Baden & Howell, 2004). In Turkey, it is used in the fields of medicine (Gürpınar, Zayim, Başarıcı, Gündüz, Asar & Oğuz, 2009; Turan, 2009), the nursery (Duman & Akbaş, 2010) and teacher training (Şendağ, 2008) at primary (Cantürk-Günhan, 2006) and secondary school levels (Tüysüz, Tatar & Kuşdemir, 2010). This approach is widely accepted as it prepares the teacher for professional life in a more efficient way than the traditional teacher oriented lessons; it is student oriented; it provides an opportunity for learning by experience and learning according to student speed and interest; it uses active methods and it makes learning more enjoyable (Savin-Baden & Howell, 2004). PBL is also used in the field of teacher education for the same reasons (Choi & Lee, 2009; Edwards & Hammer, 2004a; McPhee, 2002; Yassin, Rahman & Yamat, 2010). As students are different from each other in the classroom, a convenient solution for one may not work for another. Thanks to the problem solving skill that he/she will acquire through PBL, the prospective teacher graduates an ability to generalize the solutions (Savin-Baden & Howell, 2004).

According to the results of the studies conducted in primary, secondary and higher education, PBL increases academic achievement more than traditional teaching methods (Çiftçi, Meydan & Ektem, 2007; Deveci, 2002; Reynolds & Hancock, 2010; Şendağ, 2008; Tüysüz et al., 2010; Ünal, 2008). The persistency of the teacher is also higher as active methods are used within the framework of this approach. It also changes the attitudes towards lesson in a positive way (Cantürk-Günhan, 2006; Çiftçi et al., 2007; Deveci, 2002; Özgen & Pesen, 2008; Tüysüz et al., 2010). The main purpose of PBL is to enable students to solve problems in their professional and daily life. According to studies conducted, it can be said that the method achieves its goals (Edward & Hammer, 2004a; Kaptan & Korkmaz, 2002; McPhee, 2002; Reynolds & Hancock, 2010).

Insufficient research in this field has been conducted in Turkey (Şendağ, 2008; Ünal, 2008) although PBL is convenient for teacher training (McPhee, 2002). These research studies concern field courses. However, it is necessary to determine the convenience of PBL for the lessons of different education science, the students' attitudes towards the exercise and exercise principles. Turkey is late in using PBL in the field of education even though its advantages in fields such as medicine, law etc. has been proven. It is thought that the findings obtained in this research will guide the academics who want to use PBL in the classroom.

METHOD

Research Model

The purpose of the study is to test an education program designed in accordance with a problem based learning approach in a classroom management lesson and to determine student opinion on the exercise. Action research was used within the scope of the qualitative research. According to Bassey (1998), action research consists of investigation, evaluation and changing activities for improving education practices. In this practice, researcher teachers make plans to solve a problem that they have encountered; they apply it, assess it and expand their findings

by making necessary adjustments. Action research is highly useful as it derives from any problem; the practitioner is also the researcher; the findings are presented in the desired way; and it is not obligatory to generalize the findings (Koshy, 2005). Individual and focus group discussions, participant observation and open ended questions can be used as a data collecting instrument in the action research (Kuzu, 2009). In the present research, open ended questions were preferred as the data collecting instrument.

Research Group

The research was conducted on prospective teachers who study in the fields of Elementary Science Teaching, Elementary Mathematics Teaching, Biology, Turkish Language and Literature, English, German and Religious Culture and Moral Knowledge in the Ataturk Faculty of Education of Marmara University and who took CM courses in the fall term of the 2010-2011 academic year. These fields were preferred as their CM courses were the responsibility of the researchers. The number of students who participated in the research is 210, however data were collected from 146 students since the data collecting instrument was applied in the last week of the education semester.

Data Collecting Instrument

In the actual study, a "questionnaire form" was used for data collecting. The form was prepared by the practitioner researchers with the aim of ascertaining student opinion on PBL design. There are eight open ended questions in the form. The questions seek to ascertain student opinion on the PBL approach, teaching design, assessment style, the cooperation based teaching method and its problems.

The State and Practice of Education

In the present study, a version of PBL which was modified by the researchers was used. In the process of preparing state of education, primarily the titles were found which were appropriate for the content determined by the Board of Education: Knowing the student, communication, motivation, conflict management, teacher leadership, dealing with problematic behaviors, time management and attending courses preparedly. In line with these issues and topics, learning goals were created and scenarios for achieving these goals were developed. CM course books were examined for the scenarios (Bakioğlu, 2009; Celep, 2008; Karip, 2007; Okutan, 2008) and convenient scenarios were taken from these course books. In the event that there were no convenient scenarios in the course books, the researchers prepared them themselves. Then, instructions and project assessment rubric and presentation assessment scale were developed. Information about student responsibilities and the assessment scale was given in the instructions. A project assessment rubric was developed for assessing the problem solving texts of the groups. A presentation assessment scale was developed for assessing the presentations of the groups.

CM is a 5th or 7th term course worth two credits. The education period lasts 14 weeks. The first week of the implementation process was organized as course week. In the second week, the students were informed about PBL. Then, the students were sorted into groups of 2-6 persons. The groups chose their scenarios at random. As the scenarios were already in order, the chosen scenarios also decided the presentation order. For the remainder of the course, each group discussed its own problem scenario and its possible solutions. Four questions were prepared for this discussion in order to be systematic. The groups were given three weeks to prepare the

solution reports. The groups were given an assessment rubric as a guide for the preparation of solution reports. Furthermore, suggestions were made to the students on sources, and students were asked to use at least two scientific articles. It was also stated that using sources other than those suggested would lead to higher grades. Finally, students were required to ask two teachers with at least five years of experience to read the scenario and to add their answers to the report.

In the third and the fourth week of the exercise, the researcher lecturers made their presentations on the main issues in CM. The purpose of this presentation was for the students to form a structure for their course.

In the fifth week of the exercise, the first scenario group made its presentation. The order of the presentations was as follows:

- (1) Presenting the scenario to the classroom by role play.
- (2) Discussing the problem in the scenario and the proposed solutions with a summary of the results by the class, moderated by the presentation group.
- (3) Presenting the opinions of two teachers experienced in the subject to the class and the discussion of these opinions by the class.
- (4) Presentation of solutions by the group to the class.
- (5) Presentation of the solution to the problem in the scenario to the class by means of group role play.
- (6) Feedback given to the presentation group by the lecturer and the other groups.

At Marmara University, two exams are taken: the midterm (40%) and the final exam (60%). In this exercise, 80% of the midterm grade consists of the report prepared for problem solving and 20% of it consists of the midterm exam grade itself. The reports were measured according to a "report assessment rubric". Eighty percent of the final grade is for presentations, and 20% of it is for the grade achieved in the final exam. The presentations were measured according to a "grading scale". A peer assessment technique was also used for the presentations. In this exercise, 50% of the group grade was given by the lecturer while the other 50% was given by the other groups. While distributing the scores to the students, a "group score" method was used in accordance with a cooperation based learning method. In this exercise, the score is given to the group and all the group members obtain the same score (Roger & Johnson, 2009).

Research Practice

The research was conducted in the fall term of the 2010-2011 academic year. The education program of Marmara University consists of 14 weeks, excepting midterm and festive holidays. The research continued until the end of the education period as explained above. Student opinions on the practice were determined via a "questionnaire form" in the final week.

Data Analysis

The data obtained through the questionnaire were firstly transferred to a computer. In this phase, student answers were collated under "negative" and "positive" categories. Then, six themes were created by examining the answers given. The findings were organized according to these themes.

FINDINGS

Opinions Regarding the PBL Approach

According to the findings obtained from the student opinions, the students found PBL better and more efficient (N=103) than other teaching methods such as teacher presentation and group presentation. Some of the students stated that they would also prefer PBL in other classes were they to be given the opportunity (N=15). The reasons for finding PBL more efficient/useful/better for students is that it provides lasting learning (N=35); it supports active participation (N=20); it gives the opportunity for learning by experience (N=19); it is enjoyable and motivating (N=18), it is student oriented (N=14); it is useful for teaching experience (N=13); it gives the student an opportunity to learn by his/her own efforts (N=10) and it provides cooperation (N=5). Some of the expressions supporting the ideas above are as follows: "This method is better. I prefer this method", "This method is better. Otherwise the lessons are boring", "... we learned practically what attitude to assume in almost every case we might encounter in the future", "... lasting learning happens in the course of the studies conducted", "learning by experience enables lasting learning" and "I find it both enjoyable and lasting".

Most of the students who participated in the practice and who presented their opinions (N=121) stated that they wanted to carry out lessons with PBL and some of them stated that they did not (N=13). The students who stated that they wanted to have education with PBL suggested that: it provides an enjoyable learning environment (N=32); it offers lasting and efficient learning (N=26); it presents useful information (N=17); it allows for student participation in the lesson (N=12); and it is student oriented (N=6). The students who do not want to carry out lessons with PBL stated that they did not want it as it takes a long time; there are students who shift responsibility to their group colleagues for the work that they should be doing and there is group study involved. Some of the expressions supporting the opinions above are as follows: "This method is very nice. I would like to take the lesson again. I wish all our lessons were like that...", "I am taking this course for the second time....The way of carrying out the lesson makes me feel closer to the teaching profession", "carrying out lessons with this method is very enjoyable and it does not bore us, the students".

Opinions on PBL's Effects on Learning

All of the students (N=114) who presented their opinions on the effect of PBL on learning stated that PBL supported their learning. They also stated that they would be able to solve similar problems in their practice (N=34); they felt themselves more competent in terms of CM (N=30); and it would be useful for the problems they might encounter while teaching (N=21). Some of the students thought these practices useful, however, they did not bring life competences, such competence can only be acquired by teaching (N=21). Some of the expressions which support the opinions above are as follows: "I can say that I feel myself more competent", "This method supported me to learn efficiently... I think that I acquired opinions to deal with the problems in a good way", "I think that I can present better solutions to the problems that can occur in the classroom with these examples", "I think that it supports my learning. I can say that I am more confident in myself", "I researched the problem myself".

Opinions on the Problem Scenarios

The students who participated in the research gave positive and negative opinions on the scenarios. One hundred and two of the students who expressed positive opinions stated that

they found the scenarios clear and comprehensible and 27 of them stated that these problems are the kind of problems that can be encountered at school. As a negative, they mostly suggested the difficulty of determining the problem (N=23). There were also students who stated that the problems were not very wide-ranging (N=2) and that they were simple (N=2). Some of the expressions which support the opinions above are as follows: "the problems were very explicit, we understood them easily...", "the problems were the kind of problems encountered in the classroom", "the problems were clear and easy to identify", and "In our own problem we had difficulty in identifying the main issue".

Opinions on the Role of the Lecturer

In this study, the lecturers had a guiding role in relation to PBL. The students stated that the lecturers performed the duties required of them in their practice (N=77). Some students stated that it was good that the lecturers scarcely intervened in the process (N=8), they did not want them to be active (N=17) and they felt themselves to be more comfortable as a result (N=4). However, there were also students who were not satisfied with this role of the lecturer. Eighteen of the students wanted the lecturer to be more active in the classroom. They also demanded more evaluation after the presentations (N=12). Some of the expressions supporting the opinions above are as follows: "He performed his guidance duty... He could have been more active in intervening on the issues concerning problem solving", "The lecturer intervened when it was necessary...", "... he presented this as a constructivist approach, which was very nice", "He performed his guidance duty. He helped us to analyze the whole of the problem" and "It was good that he was in the background in the lesson. I think that this increases the self confidence of the person who makes the presentation".

Opinions on Working in a Group

The students made a group work as required by PBL. Moreover, the students chose their groups themselves. The groups consisted of two to six persons. The students were generally satisfied with working in groups. Many students stated that there was no problem in the process (N=80) and that it was an enjoyable practice (N=35). There were some students who stated that its reason was that they formed the groups themselves (N=14). In spite of the generally positive opinions, some problems were also stated. These problems concerned the sharing of subjects, an unfair distribution of work (N=20) and a dislike of group work (N=5). Despite these problems, all the groups performed their tasks in the practice. Some of the expressions supporting the opinions above are as follows: "...it was delightful to work with friends", "...we did not have any problems, "It was enjoyable", "We did not have any problem as we chose our group friends by ourselves" and "It was okay, we did not have any problems. Everybody performed his/her own task".

Opinions on the Assessment Method

The assessment of the practice was made as stated in the method section above. Most of the students (N=80) stated that they found this method useful. There were also students who stated that it was useful to be assessed by friends (N=31). Some suggested that in the assessment method, there is/may have been favoritism, which is negative (N=21). Some students indicated that written exams made in midterms and final exams should be more significant a part of the on the pass grade (N=7). Some of the expressions supporting the opinions above are as follows: "It was useful", "In my opinion, it was useful. It provided an increase in the participation", "It was useful to be assessed by other groups", "It is not very objective to be

assessed by other groups as everybody may give high scores so as not to hurt their friends" and "the assessment should absolutely be this way".

DISCUSSION, CONCLUSION AND PROPOSALS

In PBL, students conduct studies to find solutions to the problems taken from real life. With learner oriented practices, besides learning at their own learning speeds and in accordance with their own learning styles, students experience also an enjoyable process. This process increases the motivation of students (Cantürk-Günhan, 2006; Çiftçi et al., 2007; Deveci, 2002; Özgen & Pesen, 2008; Tüysüz et al., 2010) and it encourages them to take a positive attitude towards the lesson (Tan, Chye & Teo, 2009). The students found PBL more efficient and better than other teaching methods as it provides lifelong learning; it gives an opportunity to learn by experience; it gives the student an opportunity to learn through their own efforts and it provides for a cooperative approach. Other methods, noted above, refer to lecturer's teaching style and group studies, which were compared as they are used frequently in teacher education. These results show a similarity with those in the literature.

The students indicated that they would prefer PBL in their future lessons since it provides an enjoyable learning environment; it offers lifelong and efficient learning; it presents useful information; it provides for student participation in the lesson and it is student oriented. In teacher oriented practices, the only duty of students is, in general, to listen to the lecture in the classroom. Thus, the students have no other responsibility. However, PBL is a practice where the student is active in research; he/she prepares reports and shares the findings. That is to say, students hold many responsibilities in the learning process. Student oriented practices can be shown as a reason for preferring PBL over more teacher oriented methods. The findings of the present research show similarities with the findings of the study conducted by Bowe and Cowan (2004) with university students. Students found PBL interesting, enjoyable and motivating. Similar findings were also obtained in the study conducted by McPhee (2002) on prospective teachers. Also, in the study conducted by Edwards and Hammer (2004b), prospective teachers found PBL useful in terms of its practicing opportunities.

There are also students who do not prefer PBL. Five students who gave reasons for not preferring PBL indicated that it takes a long time; some students benefit from the works of others and the working in a group itself is negative. The CM lesson falls within a period when students are anxious about the Public Personnel Selection Examination and they are preparing for it. For this reason, they want to spend most of their time preparing for that exam. The students may not have wanted the PBL exercise as the work for PBL takes up a great deal of time. PBL requires that students work cooperatively in groups. Group work can mean some members may contribute little, and some students prefer not to work in groups.

PBL increases student learning thanks to its student oriented practices. This is especially the case with the problem solving skills that it encourages (Bowe & Cowan, 2004; Edward & Hammer, 2004a; McPhee, 2002; Kaptan & Korkmaz, 2002; Reynolds & Hancock, 2010), students become able to solve problems similar to those they may encounter in their own lives. The positive effect of PBL on learning has been proved in many studies (Çiftçi et al., 2007; Deveci, 2002; Reynolds & Hancock, 2010; Şendağ, 2008; Tüysüz et al., 2010; Ünal, 2008). Also, the actual study involves students statements about their gaining an understanding of CM through PBL practice. The students indicated that they would in future be able to solve problems similar to those met in practice and that they felt themselves to be more competent in terms of CM. In line with this, it may be said that PBL shows effects that are in compliance

with those found in the literature. Scenarios are used in PBL in order to present problems in such a way as they will be encountered in real life. Real or fictional events can be used while creating these scenarios (Barrows & Tampley, 1980). In the present study, fictional scenarios developed by the researchers were used. The scenarios were designed in a semi structured way so as to create original ideas. In these kinds of scenarios, there is a problem state determined by the moderator; however, the problem has more than one possible solution. While most of the students found the scenarios in the present study clear and comprehensible, some of them stated that they had difficulties in identifying the problem. The sparse information given in the scenarios may also have caused them to have difficulty in solving the problem and finding the focus. On the positive side, the students emphasized that the problems in the scenarios are the kind of problems which can be encountered in real classrooms. These findings may indicate that most of the scenarios prepared were in compliance with the rules.

In the present study, the lecturers took a guiding role as required in PBL. As the role required, they designed the teaching process; they prepared the environment, however, they did not intervene in the teaching process very much (Schmid & Moust, 2000). From the answers that the students gave, it is understood that they perceived the role of the lecturer in a positive way. The fact that half of the students indicated that the lecturer performed his task appropriately may evidence that. Moreover, the students found it positive that the lecturer did not intervene in the presentations that concerned the solution of a problem. However, there were also students who were not satisfied with the role of the lecturer. Some of the students wanted the lecturer to be more active in the classroom. They also demanded more evaluation after the presentations.

PBL combines many teaching methods. One of these methods is cooperative learning. Cooperative learning is a teaching method in which students come together to produce a product or to learn a subject and they are responsible for each other's learning. In cooperative learning, students get scores after work they produce in a group and this score is distributed to all the members equally (Roger & Johnson, 2009). In this study, cooperative learning groups were established as PBL required. The students established their own groups by themselves. The groups consisted of two to six persons. The students were generally satisfied with working in groups. Most of the students indicated that there was no problem in the process and it was an enjoyable practice. Despite generally positive opinions, some problems were also expressed. These problems concerned sharing the subject, an unfair distribution of work and a dislike of working in a group. In spite of these problems, all the groups performed their tasks. The general student satisfaction level may have resulted from the fact that the students formed their groups on their own.

As PBL is a student oriented practice and different products can be produced with different learning methods, the assessment should also be student oriented (Graaff, 2004). When it comes to student oriented assessment, such processes or authentic assessment techniques as portfolio, rubric, grading scale, control list, observation, self assessment, peer assessment come to mind (Janesick, 2003). According to circumstances, classic tests are also used in PBL (Richard & Omdals, 1980). In this practice, the written exam, rubric, grading scale and peer assessment techniques were used. Midterm and exam grades were used in giving the students pass grades. Eighty percent of the midterm grade was based on the project prepared for solving the problem and 20% of it was based on the written exam. Project assessment was made by means of the rubric. Eighty percent of the final exam consisted of preparations for solving the problem and presentation and 20% consisted of the final exam. The preparations and presentations were measured with a grading scale. The presentations were assessed by both the students and the class lecturers. Most of the students indicated that they found this assessment

method appropriate. There were also students who stated that they found it appropriate to be assessed by friends. Some of the students considered this to be negative as there is an element of subjectivity in peer assessment. There were also students who wanted the exams to be more significantly a part of the pass grade. The students had generally positive opinions about the assessment method and this may have resulted from the fact that they did not experience exam anxiety.

As a consequence, it can be said that the PBL oriented teaching design created by the researchers can be used in CM lessons. It can be said that this exercise may enable them to deal with the problems more easily thanks to the problem solving skill it brings besides academic knowledge. A prospective teacher who learns by experiencing this approach in a faculty of education can apply the solution to similar problems when he/she becomes a teacher. The exercise process provided the prospective teachers with a motivating and active learning environment via student oriented practices. It can be said that the students had positive attitudes towards the teaching design using this method. The removal of problems encountered in the exercise by the teacher will make the exercise more effective. The researchers will again use this practice in subsequent years by improving the scenarios in line with the criticisms. Similar practices can also be used in other teacher training lessons. It is thought that it will be more appropriate especially in guidance and counseling and educational psychology lessons. Apart from that, experimental research studies, where this design and different teaching methods are compared, can be conducted on the CM lessons.

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INVESTIGATION OF SOCIAL STUDIES TEACHERS' REFLECTIVE THINKING LEVELS IN TERMS OF SOCIODEMOGRAPHIC CHARACTERISTICS (AN EXAMPLE OF SANLIURFA PROVINCE)

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ABSTRACT

This research is a descriptive study for determining the reflective thinking levels of the social studies teachers. The universe of the study is the social studies teachers working in Şanlıurfa within 2009-2010 education year. Due to the accessibility of the universe of the study, no sampling was employed for the research, 277 social studies teachers working in the towns and villages of Şanlıurfa provinces participated in the study voluntarily. In order to analyze the data collected by means of Reflective Teaching Tendency Scale by Semerci (2007), arithmetic mean, standard deviation, ANOVA, Mann Whitney U, Kruskall Wallis, and LSD tests were used. At the end of the study it was found that while the reflective thinking levels of the social study teachers were found very high, their most positive perception related to the reflective thinking skills was "Open-minded" dimension. Although there is no meaningful difference in the statistics performed, it was found that female teachers have a higher reflective thinking tendency in interrogating and effective teaching, teaching responsibility and scientific, researching, being foresighted and sincere dimensions and have more positive perceptions about their profession. While there is no meaningful difference on the reflective thinking levels of the teachers on the basis of the length of service and the size of the location (province, district, village) they serve, it was found that the teachers with a length of service between 11 and 15 years have a higher reflective thinking tendency.

Keywords: Social studies, Teacher, Reflective thinking

INTRODUCTION

As a result of the explosion of information and globalization in our age, communities that are nearly nested are being influenced by each other, living conditions are getting harder and in face of these conditions values may lose validity. According to Chappin & Messick (1992, p.18) because of the developing technology in our age, even preschool children begin to realize the international social problems like arming, wars, pollution, hunger, poverty, racial discrimination, economic crisis etch. This situation makes it mandatory to train individuals who can use knowledge by reasoning instead of just storing it as it is (Bolat, 2008, p.3; Doğanay, 2007, p.281) and different viewpoints about how purpose, content and teaching of social studies which is an interdisciplinary work field for performing the social existence of an individual are formed. According to Ran (2004, p. 2–3) understanding of social studies, whose origin is to train active citizens, focuses nowadays on respecting rights and values, understanding cultural differences, fusing its individual and social responsibilities, questioning social values, creating new values, realizing important problems of the world and society in

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which one lives and developing attitudes and skills directed to seek peaceful solutions. (Martorella, 1998, p. 227). For this purpose content of social studies was enriched with social (cooperative) activities helping to develop problem solving and individual activities. (Martorella, 1996, cited in Özcan, 2002, p.30). In our country it can be seen that social studies curriculum focusing on transferring citizenship duties and responsibilities (Kocaoluk and Kocaoluk, 2000, p. 691–692), changed in this way until 2005. It was developed for becoming reflective work field. According to this approach, the purpose of social studies is to analyze students' individual and social problems, to develop their processes of decision making. Life is regarded as problem solving cycle and school is no more a place that certain content is transferred but a place that problem solving logic is perceived (Öztürk, 2006, p.26). So it can be seen that social studies lesson- whose main aim is to have students to gain skills, knowledge and values- aims to have the students train reflective thinking skills which is expressed as regulating the knowledge into daily life, analyzing and driving forward one's own unique opinion by using his knowledge (MEB, 2005).

According to Lee (2005, p.700) as a problem solving process, reflective thinking necessitates constantly evaluation of beliefs and assumptions against existing knowledge and their reasonable comments, eventually they reached judgment becomes the product of synthesis which is integrated with opposite point of view (King and Kitchener, 1994, p. 47-73). In this condition it can be said that reflective thinking, as a research which relies on solving the problem encountered, is a skill which overlaps creative thinking with encouraging production of new ideas, critical thinking with the self-evaluation dimension, metacognitive thinking process with connecting with one's experiences and considering about one's own thoughts dimension (Yorulmaz, 2006, p.30). In order to develop student's reflective thinking skills teachers need to have and apply these thinking skills. If the structure of the sciences that form the content of social studies (economy, law, sociology, history, art, politics, psychology, anthropology etch.) and its aims mentioned above are taken into account, it is extremely important to develop the abilities like feeling the problems of students in teaching-learning process, understanding, creating alternatives and convert them into action. But in our country there are no known researches about reflecting thinking skills of social studies teachers yet. It can be seen that known researches are generally made on pre-service teachers or primary school teachers (Ekiz, 2006; Erginel, 2006; Güney, 2008; İskenderoğlu, 1999; Kaf Hasırcı & Sadık, 2009; Kozan, 2007; Köksal & Demirel, 2008; Oruç, 2000; Tok, 2008). Because of these reasons it is needed to carry out a research which examines social studies teachers' reflective thinking level in Sanliurfa, and it was sought to answer the following questions:

- 1. What are the levels of social studies teachers' reflective thinking tendencies?
- 2. Do the Social studies teacher's reflective thinking levels show any significant difference according to their gender, seniority, graduation, working place and number of students in their classrooms?

METHOD

Research Model

This is a descriptive research performed to determine the social studies teachers' reflective thinking levels.

Sample and Population

The population of this study is the social studies teachers working in Şanlıurfa Province. Due to the accessibility of the population of the study, no sampling was employed. All of the teachers working in villages, town center and city center of Şanlıurfa took part in this study. A total of 277 teachers participated in the survey on a voluntary basis, 60 women and 217 men. 87 teachers are from villages, 85 are from districts, 105 are from city centers of Şanlıurfa Province. 207 of the teachers indicated that they graduated from Social Studies department of education faculty, and 70 of them indicated that they graduated from History and Geography departments of Faculty of Science and Literature. 162 teachers have 1-5 years, 76 teachers have 6-10 years, 22 teachers have 11-15 years and 17 teachers have 16 years and above professional seniority. All of the participants stated that they teach social studies at 6th grades, 231 of them teach social studies at 7th grades and 240 of them teach History of Turkish Revolution at 8th grades. 159 teachers stated that their class size is between 30-39, 53 teachers stated their average class size below 30, 65 stated that their average class size is above 40.

Instruments

Reflective Thinking Tendency Determination Scale (YANDE) generated by Semerci (2007) and Personal data form was used to collect research data. Total scale consists of 35 items, 20 of them are negative 15 of them are positive (7 items for continuously and intentional thinking, 6 items for open-minded, 5 items for inquiry and effective teaching, 5 items for teaching responsibility and scientific, 6 items for researcher, 4 items for foresighted and friendly, 7 items for view of profession). In this scale one can get minimum 35 and maximum 175 points. Rating of the scale consists of, definitely agree (5), frequently agree (4), partially agree (3), frequently disagree (2) and definitely disagree (1). Cronbach Alfa internal consistency coefficient of the scale is 0.90. On the basis of its sub-scales reliability coefficients of the scale are for the first sub-scale .79, for second sub-scale .71, for third sub-scale .74, for fourth sub-scale .77, for fifth sub scale .74, for sixth sub-scale .66 and for seventh sub-scale .35. Personal data form, developed by researcher to get information about socio-demographic features of the teachers in the working group, consists of six questions about their gender, seniority, graduation faculty and department, work place, grade of the class, and class size.

Data Collection

In order to collect the raw data a written permission was taken from Sanliurfa Regional Directorate of Education. Data collection tools were applied during the visits in the schools by researcher between March and April 2010.

Data Analysis

SPSS-Windows 13.0 package software was used to analyze research data and in all the analysis, significance was considered to be 0.5. In order to determine the school living quality perception level of the teachers, standard deviation and arithmetic means of their YANDE points were calculated, these arithmetic means are commented from 1.00 to 1.80 period as "definitely disagree", from 1.81 to 2.60 period as "too low", from 2.61 to 3.40 period as "medium", from 3.41 to 4.20 period as "frequently agree or high" and from 4.21 to 5.00 period as "definitely agree or very high". One way variance analysis (ANOVA) and independent groups t test were applied in order to examine if there are significant differences in teacher's reflective thinking level in terms of variables that are handled in the research. As a result of the ANOVA analysis between the groups, whose F values are found to be significant, LSD

multiple comparison test was used when variances were homogeneous. Furthermore before applying one way variance analysis, Levene test was applied to control homogeneity of the variances. Kruskall-Wallis test was employed when variances were not homogeneous, Mann Whitney U test was applied on binary combination of groups to determine direction of significant difference observed between the groups on whom the test were applied.

FINDINGS

In this section findings related to differentiation in terms of socio-demographic variables, which is a subject of social studies teachers' reflective thinking level, were given in the tables.

Findings about Social Studies Teachers' Reflecting Thinking Level

Table 1 shows distribution of arithmetic mean and standard deviation of the total point obtained by the participant teachers from YANDE scale.

Table 1. Arithmetic Mean and Standard Deviation Values of Social Studies Teacher's (N=277) YANDE Scale Points.

Dimensions of YANDE Scale	Minimum and Maximum Point	\overline{X}	std.dev.
Continuously and intentional thinking	7–35	29.59	3.59
Open-minded	6–30	27.92	2.66
Inquiry and effective teaching	5–25	23.09	2.27
Teaching responsibility and scientific	5–25	21.71	2.67
Researcher	6–30	26.08	3.22
Foresighted and friendly	4–20	17.52	2.38
View of profession	2–10	8.74	1.60
YANDE Total Points	35-175	158.53	13.96

When values on table 1 are examined it can be seen that social studies teachers have an average over 4 in terms of YANDE Scale and Sub-scales. According to this scale teachers generally specified as "frequently agree"

Distribution of Social Studies Teachers' YANDE Scale Points According to Their Gender

Mann Whitney U-test results made to examine if YANDE Scale points of the teachers vary according to their gender are shown in Table 2.

As it is shown on Table 2, female teachers' averages of sub-dimension total points and other sub-dimensions are higher than male teachers except for Open-minded sub-dimension. However, it is stated that the differences between teachers' points are not statistically significant (.05<p) according to gender.

Table 2. Mann Whitney U Test Results of Social Studies Teachers' YANDE Scale Points According to Their Gender

Dimensions of YANDE Scale	Group	N	Mean Rank	Total Rank	U	p
Continuously and	Female	60	144.38	8663.00	6187.000	555
intentional thinking	Male	217	137.51	29840.00	0187.000	.555
On an iminded	Female	60	133.04	7982.50	6152.500	.498
Open-minded	Male	217	140.65	30520.50	0132.300	.498
Inquiry and	Female	60	152.03	9121.50	5728.500	.140
effective teaching	Male	217	135.40	29381.50	3728.300	.140
Teaching responsibility	Female	60	143.96	8637.50	6212.500	.584
and scientific	Male	217	137.63	29865.50	0212.300	.364
	Female	60	150.39	9023.50	5826.500	.210
Researcher	Male	217	135.85	29479.50	3620.300	.210
Foresighted and friendly	Female	60	147.81	8868.50	5981.500	.328
Foresignted and mendry	Male	217	136.56	29634.50	3961.300	.326
	Female	60	155.04	9302.50	5547.500	.063
View of Profession	Male	217	134.56	29200.50	3347.300	.003
YANDE Total Points	Female	60	148.78	8927.00	5923.000	.285
I ANDE TOTAL POINTS	Male	217	136.29	29576.00	3943.000	.285

Distribution of Social Studies Teachers' YANDE Scale Points According to their Seniority

Table 3 shows the participants teachers' results obtained from Kruskal Wallis Test made to examine the differentiation of their YANDE scale points according to seniority

When table 3 is examined it can be seen that teachers who have 11-15 years of professional seniority have highest reflective thinking tendency in terms of both total dimensions and sub dimensions. However it can be seen that differences are not statistically significant [χ^2 (2) = 2.265, 4.041, 3.884, 5.427, .523, .773, 2.062, 1.998, .05<.p]

Table 3. Kruskal Wallis Test Results of Social Studies Teachers' YANDE Scale Points

According to Seniority						
Dimensions of YANDE Scale	Seniority	N	Mean Rank.	df	χ^2	p
	1–5 years	162	142.73			
Continuously and	6–10 years	76	134.30	3	2.265	.519
intentional thinking	11–15 years	22	145.95	3	2.203	.319
	16 years +	17	115.47			
	1–5 years	162	141.78			
Open-minded	6–10 years	76	126.39	3	4.041	.257
Open-minded	11–15 years	22	160.93	3	4.041	.231
	16 years +	17	140.50			
	1–5 years	162	136.44			
Inquiry and effective	6–10 years	76	134.85	3	3.884	.274
teaching	11–15 years	22	169.61	3	3.004	.274
	16 years +	17	142.38			
Ta a abin a manananaibilita.	1–5 years	162	135.79			
Teaching responsibility and scientific	6–10 years	76	148.63	3	5.427	.143
	11–15 years	22	155.52	3	3.427	.143
	16 years +	17	105.18			
	1–5 years	162	138.63			
Researcher	6–10 years	76	137.80	2	.523	.914
Researcher	11–15 years	22	150.05	3	.323	.914
	16 years +	17	133.62			
	1–5 years	162	137.68			
Foresighted and friendly	6–10 years	76	138.48	3	.773	.856
	11–15 years	22	153.02	3	.113	.830
	16 years +	17	135.74			
	1–5 years	162	140.39			
View of profession	6–10 years	76	141.09	3	2.062	.560
View of profession	11–15 years	22	141.23	3	2.002	.300
	16 years +	17	113.59			
	1–5 years	162	140.79			
VANDE Total Dainta	6–10 years	76	135.71	3	1 000	.573
YANDE Total Points	11–15 years	22	153.02	3	1.998	.513
	16 years +	17	118.50			

Distribution of Social Studies Teachers' YANDE Scale Points According to Their Graduation

Table 4 shows the participant teachers' results of Kruskal Wallis Test made to examine the differentiation of their YANDE scale points according to graduation.

Table 4. Kruskal Wallis Test Results of Social Studies Teachers' YANDE Scale Points According to Graduation

The cording to Ordination						
Dimensions of YANDE	Group	N	Mean	Total	U	p
Scale	Group	11	Rank	Rank	O	
Continuously and	Field	207	139.05	28782.50	7235.500	.987
intentional thinking	Other	70	138.86	9720.50	7233.300	.907
On an minded	Field	207	140.62	29108.50	6909.500	.547
Open-minded	Other	70	134.21	9394.50	0909.300	.347
Inquiry and effective	Field	207	137.35	28431.00	6903.000	.541
teaching	Other	70	143.89	10072.00	0903.000	.541
Teaching responsibility	Field	207	137.28	28416.50	6888.500	525
and scientific	Other	70	144.09	10086.50	0000.300	.535
Researcher	Field	207	135.90	28131.50	6603.500	.265
Researcher	Other	70	148.16	10371.50	0003.300	.203
Foresighted and friendly	Field	207	132.81	27491.50	5963.500	.025*
Foresignied and mendry	Other	70	157.31	11011.50	3903.300	.023
View of profession	Field	207	138.73	28718.00	7190.000	.920
view of profession	Other	70	139.79	9785.00	/190.000	.920
VANDE Total Daints	Field	207	138.10	28587.00	7050 000	710
YANDE Total Points	Other	70	141.66	9916.00	7059.000	.748

As it is shown in Table 4, in terms of total scale score and sub dimensions averages of social teachers graduated from other faculties and departments are higher except for "continuously and intentional thinking" and "Open-minded" dimensions. However it is stated that these observed differences are significant only in "Foresighted and friendly" sub dimensions (p<.05).

Distribution of Social Studies Teachers' YANDE Scale Points According to Their Work Place

Table 5 shows results of one way ANOVA analysis made to examine if there is significant difference between teachers YANDE scale points and their work place.

When table 5 is examined it can be seen that teachers' highest ratings for "Continuously and intentional thinking", "Open-minded", "Inquiry and Effective Teaching" sub dimensions and scale total points belong to teachers that work in villages, lowest ratings belong to teachers that work in city centers. However it is stated that there is no significant difference between teachers' YANDE points and their working place (.05<p).

Table 5. One way ANOVA Results of Social Studies Teachers' (N=277) YANDE Scale Points According to Their Working Place

Dimensions of YANDE Scale	Work Place	N	\overline{X}	std.dev.	F	p
	Village	87	29.68	4.00		
Continuously and	District	85	29.75	3.12	.297	.744
intentional thinking	City Center	105	29.38	3.61	.291	./44
	Total	277	29.59	3.59		
	Village 87 28.12 2.59					
Onen minded	District	85	28.04	2.62	.904	.406
Open-minded	City Center	105	27.64	2.76	.904	.400
	Total	277	27.92	2.66		
	Village	87	23.29	2.44		
Inquiry and	District	85	22.85	2.23	.808	.447
effective teaching	City Center	105	23.10	2.16	.000	.44/
	Total	277	23.09	2.27		
Teaching responsibility	Village	87	21.72	2.94		
and scientific	District	85	21.48	2.62	.535	.586
	City Center	105	21.88	2.47	.555	.500
	Total	277	21.71	2.67		
	Village	87	25.98	3.79		.572
Researcher	District	85	25.87	2.84	.559	
Researcher	City Center	105	26.34	3.01	.559	
	Total	277	26.08	3.22		
	Village	87	17.58	2.59		
Foresighted and friendly	District	85	17.60	2.05	.192	.825
1 oresignica and menary	City Center	105	17.40	2.47	.172	.023
	Total	277	17.52	2.38		
	Village	87	8.70	1.67		
View of profession	District	85	8.85	1.63	.295	.745
View of profession	City Center	105	8.69	1.52	.293	.743
	Total	277	8.74	1.60		
	Village	87	159.11	15.66		
	District	85	158.47	13.13		.884
YANDE Total Points	City Center	105	158.11	13.21	.123	
	Total	277	158.53			

Distribution of Social Studies Teachers YANDE Scale Points According to Class Size

Table 6 shows the participant teachers' results for one way ANOVA Tests made to examine the differentiation of their YANDE scale points according to class size.

Table 6. One way ANOVA Results of Social Studies Teachers' (N=277) YANDE Scale Points According to Their Class Size

Dimensions of YANDE Scale	Class Size	N	\overline{X}	std.dev.	F	p	LSD
	21–29 Students	53	28.64	3.78			
Continuously and	30-39 Students	159	30.04	3.59	3.442	0.33*	31-39 st.>
intentional thinking	40 and more	65	29.26	3.29	3.442	0.33*	21–29 st.
	Total	277	29.59	3.59			
	21-29 students	53	27.35	2.72			
Onan mindad	30-39 students	159	28.12	2.64	1.663	.191	
Open-minded	40 and more	65	27.87	2.64	1.003	.191	
	Total	277	27.92	2.66			
	21-29 students	53	22.83	2.06			
Inquiry and	30-39 students	159	23.30	2.34	1.630	.198	
effective teaching	40 and more	65	22.78	2.22	1.030	.170	
	Total	277	23.09	2.27			
Teaching	21–29 students	53	21.32	2.89			
responsibility and	30–39 students	159	21.95	2.63	1.599	.204	
scientific	40 and more	65	21.43	2.54	1.577	.204	
	Total	277	21.71	2.67			
	21–29 students	53	25.39	3.61			
Researcher	30-39 students	159	26.44	2.96	2.541	.081	
Researcher	40 and more	65	25.76	3.42	2.571	.001	
	Total	277	26.08	3.22			
	21–29 students	53	16.88	2.78			
Foresighted and	30-39 students	159	17.74	2.12	2.623	.074	
friendly	40 and more	65	17.49	2.58	2.023	.074	
	Total	277	17.52	2.38			
	21–29 students	53	8.90	1.74			
V:	30–39 students	159	8.69	1.53	252	702	
View of profession	40 and more	65	8.75	1.65	.352	.703	
	Total	277	8.74	1.60			
	21-29 students	53	155.05	14.08			
YANDE total	30-39 students	159	160.23	13.62			31-39 st.>
points	40 and more	65	157.23	14.22	3.152	.044*	21–29 st.
	Total	277	158.53	13.96			

When table 6 is examined it is stated that, except for "view of profession" sub dimensions, in terms of other sub- dimensions and YANDE scale total points the highest average belongs to the teachers that have 30-39 students in their classrooms. However it is stated that these differences are significant in "Continuously and intentional thinking" sub-dimension and YANDE scale total points (p< .05). As a result of the LSD test made to determine which groups are the source of significant difference it is seen that significant differences are between teachers that have 21-29 students and teachers that have 31-39 students in favor of teachers that

have 31-39 students. Differences between other groups are not found to be statistically significant (.05<p).

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

At the end of the study it was found that reflective thinking level of social studies teachers was very high (4.52), their most positive perception related to their reflective thinking tendencies was in Open-minded dimension. If related literature is examined it can be seen that similar results were obtained in the researches that examine reflective thinking level of teachers who work different educational levels (Dolapçıoğlu, 2007; Kaf Hasırcı & Sadık, 2009; Meral, 2006). In this case it can be said that participant teachers are tended to revise all of the schools' elements to evaluate teaching and students' better training by both reflecting in action and on action about students' interaction and researching about pre-action plan and teaching processes. The reason of teachers' most positive perception being Open-minded is because this dimension may probably contain negative behaviors like: "I do not revise teaching achievements (target behaviors), I am not open to questions, reactions, and proposals related to teaching practices, I do not look at events from different perspectives in teaching-learning process, I do not give importance to educational activities of my students, I am not responsible for my students' emotional (affective) behaviors". According to Kağıtçıbaşı (1999, p.42) people's tendency to be favored socially makes it harder to evaluate themselves objectively. In other words the reason for teachers' high points from this sub-scale may be their tendency to be favored socially. Besides it can be said that the source of this result may be the structure of the curriculum given the Curriculum being implemented in accordance with the guide books prepared by the Ministry of Education since 2005 and programs caring about not only cognitive behaviors but also psychomotor and affective behaviors with collaborative activities directed to activate students.

The findings showed that female teachers have higher reflective thinking levels and more positive professional perceptions in Inquiry and effective teaching, teaching responsibility and scientific, researcher, foresighted and friendly dimensions. When similar researches on in service teachers are examined, it can also be seen from findings that female teachers have higher open-minded (Kaf Hasırcı & Sadık, 2009; Kılınç, 2010), more positive professional perceptions (Kılınç, 2010), higher job satisfaction (İnce, 2006) and better reflective thinking abilities than male teachers (Aslan, 2009; Özcan, 2002). Since Dolapçığolu's work (2007) determined that female teachers have higher levels reflective thinking about changes that can be made in lessons, taking students learning levels into account, creating diversity in education, it forces us to think that these results are related to choice of profession. The findings that show women behave more idealistic in choosing their job (Övet, 2006) and are more open to student responses about teaching practices support this opinion (Myhill, 2002; Palambo, 2001; Younger, 2000, cited in Özyurt, 2006, p.324).

As a result of the research it is stated that there is no significant difference between social studies teachers' seniority, work place and their reflecting levels. The teaching profession is first of all a humanitarian profession (Uçan, 2001). In this respect regardless of workplace and seniority, all teachers' reflective thinking toward being open-minded, taking care of students' expectations and requirements, bringing diversity to teaching process, renewing themselves, executing educational activities as planned, regulating participatory teaching environment, monitoring the development of students and cooperating with other teachers and managers (Balcı, 1996; Brophy, 1988; Cruichshank, Bainer & Metcalf, 1995), can be considered as a positive result. Although there is no significant difference having 11-15 years of professional teachers' relatively higher reflective thinking levels can be explained with their thinking skills

growing with their experience and sense of ownership over their profession. While Rodgers (2002) emphasized that as teachers get experienced they realize factors that affects learning and teaching more quickly, Taggart & Wilson (2005) indicated that experiences make teachers more competent in blending theory and practice. In the researches made by Dolapçıoğlu (2007) and Kılınç (2010) determining that teachers' reflective thinking levels are high in parallel to their working years, the importance of experience in reflective thinking can be seen as the supporter of this idea.

In this research it is determined that teachers graduated from the faculties and departments outside the area have significantly higher reflective thinking levels in foresighted and friendly dimension. This dimension of the scale is generally includes statements related to the teachinglearning process (helping students see the future, exchanging of ideas related to teaching with other teachers, utilization other teachers' positive constructive criticism.). Social studies is a subject in which taught knowledge needed to be internalized and turned into behavior, and it needs to be taught with a universal educational approach due to its structure that contains basic information, skills, values, attitudes about social life (MEB, 2005). According to descriptions of National Council of Social Studies (NCSS, 2004) teachers should address the subject deeply, by considering ethical dimensions of the subject they should make knowledge significant for the student and integrate it in practice. In this case it can be said that teachers who do not have pre-service education related to social studies and special teaching methods need to think more carefully and systematically in pre-action (planning the teaching), in-action (implementing) and after action (evaluating) to be able to teach by developing students' researching, applying, decision-making skills and their social values (Dorow, 1989, p. 2-4). Although there is no statistically significant difference in other dimensions of reflective thinking, as a supporter of this idea, teachers who graduated from other departments have higher levels.

At the end of the study it is seen that in terms of both "Continuously and intentional thinking" sub dimension and total scale score, teachers that have 30-39 class size have highest reflective thinking level, and it is stated that as class size decreases teachers perception of profession changes in a positive way. These two findings can be explained with "as class size increases, teaching and managing gets more difficult." According to Lee (2005, p.700) teachers generally start reflective thinking process when they encounter a problem in their classrooms and this process requires teachers to realize what's happening in the class, get information about the problem(s), to create alternative ways of solution and act by choosing the most logical of them (Moallem, 1997). Therefore as class size increases it gets harder for teachers to plan, implement and evaluate teaching by considering the circumstances in accordance with students' interests, abilities, needs (Brophy, 1988; Doyle, 1986; Edwards, 1993), chaos appears more often (Gottfredson, 1986; Sadık, 2006; Supaporn, 2000;) and class management gets more difficult. In this condition it can be said that in crowded classrooms teachers' encountering the situations that needs them to reflect more often develops their reflective thinking skills, on the other hand it causes them to get tired mentally. As a result of this teachers perception of profession decreases. The findings (Glickman & Tamashiro, 1980; Lewis, 1999; McNmara & Moreton, 1995) showing teachers of crowded schools spend more time for instructional and managerial problems, feel themselves inadequate and live stress are parallel to this idea.

In this research no application was made to improve teachers' reflective thinking skills, YANDE scale was applied to examine the existing situation. At the end of the study it can be seen that social studies teachers have very high reflective thinking tendencies and there is no significant difference in their reflective thinking levels according to their gender, seniority,

workplace variables. It is stated that teachers graduated other departments are more proactive and sincere; 11-15 years of professional teachers have relatively higher reflective thinking levels. It is also stated as class size increase teachers' continuously and intentional thinking tendency increases significantly but their perception of profession decreases. Since there are only limited researches related to in-service teachers' reflective thinking skills yet, similar researches with different sample groups on social studies teachers or with other branch teachers can be made. Getting results that show the importance of experience in reflective thinking shows teacher candidates need to be prepared for the profession with enough knowledge and maximum possible practice. In this respect atmosphere can be prepared for pre-service teachers to reflect on practices, exchange their experiences and reach higher capacity by doing regular evaluation meeting after micro training practices, school observations, their internship practices. Inexperienced teachers can be provided to observe experienced teachers' classroom so that they can learn their possible future school and class environments better, and they examine deeply how to reflect. Research on students can be planned in order to examine the effect of social studies lesson, whose purpose is to improve the skills of reaching and processing the information, on reflective thinking skills

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A COMPARISON OF SELECTED CLASSICAL GUITAR TEACHING METHODS AND A REVIEW OF THEIR IMPLICATIONS FOR GUITAR EDUCATION

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ABSTRACT

The introductory stage of classical guitar education is critically important as students gain the fundamental playing techniques and motor skills at this level. It can be seen in the literature that various guitar teaching methods have different educational approaches to guitar education. The purpose of the present research is to maintain the similarities and differences of some widely used classical guitar teaching methods that were written in early nineteenth century and commonly accepted in guitar education literature. For this purpose documentary surveying method was used. In this context, the data of research was collected by surveying the methods and literature. At the end of the article, some implications and recommendations are also considered by the author.

Key Words: Classical guitar, Classical guitar education, Classical guitar teaching methods.

INTRODUCTION

The classical guitar is a polyphonic instrument that can be used in a wide range of music genres from high-level art music to current and popular music genres and from folk music to jazz. As is the case with all other musical instruments, the introductory stage of the musical training is especially of importance for the classical guitar, since this is the period in which the student will both acquire the basic behaviours related to guitar playing and begin to love their instrument (Erim, 2009: 19). Within the context of the introductory stage of the classical guitar training, one of the materials most influential to the behaviours to be acquired by the student is the method employed in courses.

Say (2002: 124) defines the method as a series of books providing examples of musical notations on a consistent educational line, employed from the initiation of the introductory stage extending from the easiest to the most difficult lessons. In Turkey, various studies have been conducted on the methods utilized in classical guitar training. Erim (2005) listed the guitar methods most commonly used in Turkey as "La Escuela de la Guitarra" by Mario Rodrigues Arenas, "Classical Guitar Tutor" by John Mills, "Guitar Method" by Ziya Aydıntan, "Classical Guitar Method" by Ahmet Kanneci, "Introductory Method for Classical Guitar" by Bekir Küçükay, "Classical Guitar Method" by Murat Işbilen and the guitar methods prepared by Sadık Yöndem for Anatolian Fine Arts High Schools. Çelik (2005) states that all of these resources are actively utilized in Turkey and adds that the content of the guitar method

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prepared by Sadık Yöndem lends itself to use also by institutions training music teachers. In his research, Özdek (2006) points out to Arenas as the most prominent of the foreign guitar methods used most commonly at institutions providing amateur guitar training and concludes that this method is followed by "Complete Method for Guitar" by Ferdinando Carulli and "Metodo de Guitarra" by Dionisio Aguado. The same research identifies the most commonly used Turkish resources as "Classical Guitar Method" by Murat Işbilen, "Guitar Method" by Ziya Aydıntan, "Classical Guitar Method" by Ahmet Kanneci and "Introductory Method for Classic Guitar" by Bekir Küçükay. In another research study, Şahin (2008) states that the method most commonly used at Musical Education Departments of Faculties of Education and at Anatolian Fine Arts High Schools is the Arenas method, which the author concluded to be in concert with the guitar training program delivered under music teaching programs in terms of its content. The research study conducted by Dalkılıç (2010) specifies that "Method for the Guitar" by Matteo Carcassi and the guitar training series by Abel Carlevaro are also among the methods utilized at academic education institutions.

Methods encompass, among others, the personal views of its composer or its author regarding the learning process for the instrument in question. The author of the method presents their own point of view on the training required for the instrument in a certain order. The means through which the author relates their own point of view to students are the teachers who implement the method concerned. Each method has its strengths and weaknesses. While certain methods are based on both technical and musical development, others give address only technical development as a priority. For a classical guitar teaching, having a high level of knowledge of classical guitar methods is one of the preconditions of effective and efficient guitar training.

Various methods have been published throughout the history. However, specifically the methods prepared in the first half of the 19th Century are of great importance in that they constitute the basis for modern classical guitar technique.

METHOD

In this research, in order to describe the present situation documentary survey method was used. The literature was examined and the classical guitar method books that are mostly used in guitar education in Turkey were determined. Some of the method books written in 19th Century were analysed and compared in terms of usage of the scales, arpeggios, chords, tonality, position chancing and other technical components relating to classical guitar. Also the exercises and etudes given by the composers in the method books were examined if they start with the simplest and easiest ones and continue with gradually increasing difficulty.

CLASSICAL GUITAR TEACHING METHODS WRITTEN IN EARLY NINETEENTH CENTURY

Ferdinando Carulli: Methode Complete pour Guitare, Op. 27 (1810)

Ferdinando Carulli was an Italian composer and guitarist who was born in 1770 and died in 1841. After having attained great success in his home country, Italy, as a concert guitarist and teacher, he went to Paris in 1808 and spent the rest of his life here. Carulli never had a guitar teacher and his training stemmed solely from his own efforts (Bone, 1954: 67). The fact that he did not work with any teachers poses a difficulty in associating the roots of his guitar school to

a certain tradition. Morris (2005: 8) states that Carulli brought a new dimension to guitar playing and is regarded as the first guitarist raising the popularity of the guitar in Paris in the early 19th Century. The guitar method by Carulli, Op. 27 "Methode Complete pour Guitare" was published in Paris in 1810. This method is acknowledged as one of the first most effective methods for the six-string guitar. The method was quite popular in years following its publication and was rapidly disseminated throughout Europe. The fourth edition of the method was followed by its fifth, sixth and seventh extended editions (1825, Op. 241). The extended edition included six new studies with 44 new tracks.

The method starts with a short introduction by the composer followed by the rudiments of music including note values, rests, clefs and accidentals. Then, the method goes on to define the guitar and open strings and to demonstrate the tuning of a guitar. The subsequent topic in the method is the appropriate seating position for a guitar player. Carulli (1955) states that a guitar should not be seated on a position too low or too high and it should be held upon the left leg with the left leg raised with the use of a foot stool. According to the composer, the left elbow should not be kept fixed at a certain point and it should be able to move in line with the positions provided for in a given musical piece. Having presented the whole body of such general information, the method addresses diatonic scale exercises formed with natural notes in the first position. A close review of these exercises reveals that the right-hand approach of the composer is rather different from the approach preferred today. Within the context of this approach, fifth and sixth strings are played by the thumb (p), while the first, second and third strings are played by the index (i) and middle fingers (m). The same approach is also encountered in the Carcassi Method, another one of the important methods of the 19th Century. In the Carulli Method, the diatonic scale exercises are followed by chromatic scale exercises in the first position. Through all of these scale exercises, the composer ensures an equivalent level of practice for all fingers of the right and left hands, after which he presents an introduction to the topic of chords and the arpeggio technique. This section includes various arpeggio exercises played with the utilization of p, i and m fingers of the right hand in major tones with one, two, three or four sharps and one flat again in the first position. Following this section, the Method addresses the topic of tonality. Tonality exercises start with scale exercises in C major in the first position together with a small musical piece. Then, the Method presents G major, D major, A major, E major, F major, A minor, E minor and D minor tonalities, respectively, and provides an example for each tonality in the form of scale exercises with one small musical piece. These exemplary pieces merit attention, as they are all in the first position and none of them include any special techniques that demand physical force from the student such as barre, ligado or ornamentation. This observation is a clear indication of the educational character of the composer. The next sections of the method present studies and ligado exercises with the demonstration two-voice scales, three-, six- and eight-tone intervals and higher positions and the frequent utilization of the barre technique. The final sections of the method is composed of musical pieces composed by the composer for students at different levels which put into practice the information given in the remaining sections of the method.

A review of the studies given in Carulli's Method lends itself easily to the impression that he knew exactly what a fresh student needs at the introductory stage of guitar teaching (Krick, 1942: 207-211).

Francesco Molino: Methode pour la Guitare, op.46 (1824/25)

Francesco Molino was an Italian composer, violinist and guitarist who was born in 1775 and died in 1847. He wrote two concertos for the violin and one concerto for the guitar. He was one

of the few composers who wrote concertos for the guitar in the 19th Century (Morris, 2005: 86). The method of the composer was published in 1824 or 1825 in Paris. Similarly to Carulli's Method published in 1810, this method starts with the introduction of the guitar and the rudiments of music. In his method, the composer introduces the notes of open strings and the frets in the first position and then, addresses the chords. It is observed that the method also addresses the barre technique at this point. The method goes on to present arpeggio exercises in the form of variations in the C major tone in the first position. Here, there are thirty-six variations addressing different combinations of the right-hand fingers. The next section of the method presents arpeggio exercises and ornamentations followed by the topic of tonality which is presented in a section providing scale, cadence and prelude exercises in twelve major and twelve minor tonalities as well as one small piece for each exercise. At the end of the method, the composer introduces a sonata he wrote for the violin-guitar.

Fernando Sor: Methode pour la Guitare (1830)

Fernando Sor was a Spanish composer who was born in 1778 and died in 1839. In spite of the absence of exact information, it is presumed that the guitar he used was a six-course guitar (Turnbull, 1991: 83, 84, 85). Italian guitarist Federico Moretti (1765-1838) who went to Spain in 1795 was an influential figure in directing Sor's interest to guitar for serious compositions. The presence of Moretti in Spain was a source of inspiration for the training of various virtuosos including Sor and Aguado (Morris, 2005: 9). Sor went to France in 1813 and spent the rest of his life here. He created approximately two hundred pieces ranging from opera to chamber music.

The first edition of Sor's Method was published when the composer was fifty-two years of age. According to Morris (2005: 45), this method, written by Sor at a later age of his life, reflects the experience of his whole lifetime as a guitarist and teacher. In his method, Sor emphasizes the importance of his background in composition education and his mastery with other instruments. This method is based on the motif that "To become a sophisticated guitarist, one needs to be a sophisticated musician and an intellectual at the same time". According to the composer, a guitarist must never be a player of notes, but an educated musician (quoted by Morris, 2005: 42-45).

The method examines each component of the guitar technique in detail. Posture, seating position and angles of fingers and wrists are not only explained in words, but also demonstrated with drawings. Sor's approach to the seating position is quite different from those prevalent in his period. According to him, raising the left leg upon a foot stool is not sufficient in the seating position. The guitar may be played more comfortably if the player leans on a table edge and puts the weight of the instrument onto the table. The use of the left and right hands is explained in detail within the method. Rather than providing studies designed to advance a fresh student of guitar playing step by step, this method is composed of methods prepared independently from any given position with the aim of enabling the student to acquire certain behaviour. The composer attached specific importance to exercises with three- and six-tone intervals. He also addressed this same topic in various studies he rendered. However, these studies do not take into account the existing knowledge of positions or whether right- or left-hand fingers are of sufficient maturity. The composer's approach to the guitar technique is based on rules of harmony. He himself also stresses this point many times in his method. Pointing out that a guitarist with a command on harmony is always more advantageous than a guitarist without such command, he emphasizes that he always had the harmony in mind while writing the finger numbers in his works. Guitarist Andres Segovia

(1893-1987) remarks that there is an absolute balance between pedagogical objectives and natural musical beauty in Sor's studies (quoted by Grunfeld, 1974: 182).

Matteo Carcassi: Methode Complete pour la Guitare, op.59 (1836)

Matteo Carcassi was a composer and guitarist who was born in 1792 and died in 1853. It is well known that he started playing the guitar at a very early age. After attaining great success in Italy as a virtuoso, he went to Paris in 1820. At around the time when Carcassi went to Paris, the most famous guitarist there was Carulli, whose method was the most popular guitar method not only in France, but throughout Europe (Bone, 1954: 64). Carcassi's Method was published in 1836 in Paris and bears similarities with Carulli's Method in terms of its structure.

Carcassi's Method is composed of three sections. The first section addresses rudiments of music and provides information on the seating position. Then, the Method aims to ensure the simultaneous operation of the fingers of both right and left hands by presenting diatonic and chromatic scale exercises utilizing all strings in the first position. A close look at the scale exercises in Carcassi's Method leads to the observation that the right-hand approach of the composer is rather different from the one preferred today. According to this approach, fifth and sixth strings are played by the thumb (p), while the first, second and third strings are played by the index (i) and middle fingers (m). The same approach is also encountered in the Carulli Method.In contrast, within the context of today's methods, all strings are operated by index (i) and middle fingers (m) except in special situations. The next topic addressed by the method is the chords. Following the definition and examples of chords, the composer goes on to present more than twenty arpeggio exercises on two easy-to-play chords in the C major tone in the first position. These exercises lead to the recruitment of all fingers of the right hand. Chords and arpeggios are followed by the concept of tonality. Tonality exercises provided in Carcassi's Method are much more enlightening and educational than the other methods published in the same period. It is obvious that the composer attaches specific importance to this stage of the method. In his remarks on the concept of tonality, Carcassi presents the scale of that tonality in the first position and then reinforces the sense of tonality with cadence and scale exercises. Then, a small prelude and at least three small musical pieces for each tonality await the attention of students. These exercise steps are performed at C major, G major, D major, A major, E major, F major, A minor, E minor and D minor tonalities, respectively, thereby enabling the student to perform sequence, cadence and scale exercises and eventually to reach a position where they can play at least three pieces per tonality. The fact that none of these exercises include any special techniques that demand physical force from the student such as barre, ligado or ornamentation is regarded as an indication of the pedagogic personality of the composer. The second section of the method is allocated to special techniques used in guitar playing like slurs, various ornamentations, vibration and harmonics. Contrary to Carulli, Carcassi provided a very large scope to the topic of ornamentations in his method. It is well known that the guitarists of the 19th Century used these ornamentations quite frequently. The method can also be regarded as an important reference in this sense. The method then addresses the concept of position. To this end, this section presents small musical studies where scale exercises and barres are frequently used in the fourth, fifth, six, seventh and ninth positions. The third section is composed of musical pieces encompassing all techniques and musical elements introduced by the composer in his method.

Dionisio Aguado: Nuevo Metodo para Guitarra (1843)

Dionisio Aguado was a Spanish composer and guitarist who was born in 1784 and died in 1849. He took his first guitar lessons from Padre Basilio. Also teaching Fernando Ferandiere and Federico Moretti, Padre Basilio was one of the prominent guitarists and teachers of the period (Annala and Matlik, 2007: 42-43). Aguado learned from his teacher the traditional technique of guitar playing and brought this technique to quite advanced levels through the methods he wrote (Morris, 2005: 13). The composer devoted his life to playing the guitar and to studies for the advancement of the guitar technique. Aguado is one of the first guitarists who utilized the nails for playing the guitar. In addition, he is also one of the first guitarists who tried to play the guitar without having his little finger resting on the soundboard. Resting the little finger on the soundboard was then a habit and general practice dating back to older years. This technique was also employed by composers including Carulli, Carcassi and Molino, who also prepared their methods on the basis of this approach (Annala and Matlik, 2007: 42, 43).

Aguado prepared four methods, the first of which was published in 1819 in Madrid under the title "Colleccion de Estudios". This method include forty-six studies of the composer along with a glossary, information on strings, the seating position, nails and rudiments of music. In this method, Aguado stated that the guitar must be seated on the right leg. This position is the same as that employed by today's Flamenco guitarists. However, the composer changed this seating position in his later methods and concluded that having the guitar seated on the left leg in a manner closer to the modern approach would lead to better results. In addition, the method also explains the ideal shape for the nails of the right hand. Aguado was one of the very few guitarists who employed their nails to play the guitar in the first half of the 19th Century (Morris, 2005: 47).

The second method by Aguado, "Escuela de Guitarra" was published in 1825 in Madrid. This method provides new ideas where the possibilities of the guitar are utilized to a larger extend than that in the first method (Annala and Matlik, 2007: 42-43). The next method by Aguado, "Nouvelle Methode de Guitarre Op. 6", was published in 1834 in Paris. This method is more for amateurs. Aguado expresses his views of this method as follows:

"With this work of mine, I wanted to provide a possibility for guitar-lovers to learn to play the guitar through enjoyable musical pieces in a short period of time." (quoted by Annala and Matlik, 2007: 42-43).

Morris (2005: 13) states that this relatively short and less detailed method is for those who wish to learn to play the guitar in a faster way. "Nuevo Metodo para Guitarra", published in 1843 in Madrid, on the other hand, was one of the most fundamental guitar methods of the 19th Century and beyond. With numerous editions, this method is of historical importance in that it provided the essentials of the modern guitar technique (Annala and Matlik, 2007: 42-43). The method is composed of two main sections, namely the theoretical section and the practical section. The theoretical section introduces the specifications of a good guitar, the ideal seating position, the open strings of the guitar and the fingers of the right and left hands. In the practical section, the composer is observed to examine each component of the guitar technique. Each exercise presented in the method is explained in detail. Along with Sor's Method published in 1830, this method is probably the most comprehensive of all guitar methods prepared in the 19th Century. In his method, the composer did not follow a gradual order from monophony to polyphony. Instead, he preferred directly presenting two- and three-voice

studies. These studies were at the most advanced level in terms of both their musical qualities and the guitar technique involved, but they were not in a consistent order extending from the simplest to the most difficult study. A review of the studies given in the first position gives way to the clear observation that these are rather difficult studies for a beginner. In order for a student to be able to play these studies, they need to be at a certain level. Encountering notes and two-voice tracks played in the fifth and seventh positions right at the beginning of the Method indicates that this is a level much higher above a fresh student of the guitar. This situation is also continued in the same manner in the later sections of the method. Slurs, ornamentations and trills relevant to the Method are explained in great detail. The pedagogical aspect of the composer's personality is evident in the scales played on a single string, two-voice scale exercises provided with masterfully-contemplated finger numbers and arpeggio studies written for the advancement of right-hand fingers. Each technique introduced in the method strikes the reader as a piece of the musical structure within the studies written by Aguado.

Morris (2005: 13) emphasizes that this method is the most important one by Aguado which reflects his guitar education in the most effective manner. Guitar teachers today recommend this method for a student to learn the classical guitar technique in the most accurate manner. This method is frequently mentioned also by the famous guitarist of the 20th Century, Andres Segovia (1893-1987). Master performers like Tarrega, Segovia, Bream and Williams availed themselves of this method. It would not be wrong to state that this method constitutes the basis of the modern technique of guitar playing (MacKillop, 2003: 6).

Napoleon Coste: Methode Complete pour la Guitare de Fernando Sor, Redigee et Augmente par N.Coste (1845)

Napoleon Coste was a French composer and guitarist who was born in 1806 and died in 1883. He took his first guitar lessons from his mother. He went to Paris in 1830 and met Carulli, Carcassi, Aguado and Sor there. Together with Sor, he worked on guitar playing and composition (Morris, 2005: 20). His pieces were first published in 1840 (Bone, 1914: 77). Coste advanced and sustained various ideas of Sor on the guitar technique and composition and was regarded in this regard as the protégé of Sor. Following Sor's death, he republished and even rewrote his method (Morris, 2005: 20). The method starts with the introduction of the tuning methods for the guitar. Then, the method addresses the rendering of the natural frets from the sixth string to the twelfth fret of the first string. The second lesson in the method is a two-voice study rendered with the fingers p and I of the right hand, followed by a scale exercise at the C major tone starting from the first position and continuing until the eight fret. This method is observed to pass directly to studies without introducing information on positions and more strikingly, to refrain from adhering to any certain position. A review of the studies given in Coste's Method indicates that these studies were given by the composer in no particular order of difficulty. In the first sections of the method, the reinforcement of the concept of tonality is provided by presenting firstly the series of that tonality, followed by a scale exercise on that series and then, a small study in that tonality. However, the difficulty levels of these scale exercises and studies are of a nature well above the level of a fresh student. Barres, melodies with glissandos, slurs, use of advanced positions, sudden position changes and wide intervals, passages requiring fast rendering and an intense counterpoint structure are quite evident in the method. In the next sections of the method introduce major and minor scale exercises on a single strings, two-voice in all tonalities, various studies written by Sor to teach the three- and six-tone intervals, descending and ascending slur studies prepared again by Sor and some studies and pieces provided by Coste. These studies and pieces are observed to be gravitated towards advanced students. The method ends with twenty-six studies written by Sor for advanced guitarists.

Luigi Legnani: Metodo la Chitarra, op.250

Luigi Legnani was an Italian composer and guitarist who was born in 1790 and died in 1877. In addition to receiving education on the guitar and various string instruments, he was primarily trained as a singer and performed in various operas. As a guitarist, he became one of the most well-known virtuosos in Europe. He has more than two hundred and fifty compositions for the guitar (Morris, 2005: 15). The composer wrote a forty-page method which is not very well-known and visible. This method starts with the introduction of open strings and fingers of the right and left hands. Following an explanation of accidentals, the composer presents a chromatic scale starting from the sixth string and ending at the twelfth fret of the first string. The next stage of the method is composed of scale exercises rendered with three, four, five, six, seven and octave intervals, followed by a detailed explanation of note values and scales. The next topic in the method is constituted by slurs and ornamentations. After ornamentations, explanations are provided for dynamics, key signatures and concepts of tonality and seating position and then, some arpeggio exercises are provided in the first position. The method ends with a demonstration of how a small musical piece can be composed and how the tuning of the guitar should be performed.

Johann Kaspar Mertz: Schule für die Guitare

Johann Kaspar Mertz was a Hungarian composer and guitarist who was born in 1806 and died in 1856. He started playing the guitar and the flute at early ages and he was recognized as a child prodigy in a short period of time. He is known as the composer of the most virtuosic guitar pieces of his time. The composer prepared a guitar method which is not very well known today. This method is a small work of twenty-eight pages and is composed of two sections, namely theoretical and practical sections. In the theoretical sections, the composer explains information on intervals, notes and rest durations, pace-changing signs and key signatures and speed and density terms. The practical section, on the other hand, starts with two-, three- and four-voice exercises with the utilization of p and i fingers in the first position. These exercises are followed by four-scale exercises for p, i, m and a fingers of the right hand with various note values again in the first position. The next topic of the method is the concept of tonality, where we find tonalities with maximum five sharps and five flats along with two-octave series and one cadence exercise for each tonality. Once the topic of tonality is given, the method goes on with slurs and ornamentations. After this stage of the method, the remaining section presents studies prepared by the composer, ordered in a certain system. It is not possible for a fresh student of the guitar to be able to perceive these exercises, and to render them before a certain level of finger development. In fact, it is striking to observe the near absence of exercises for the technical and musical development of a student and of the repetitions required for the reinforcement of a certain behaviour taught within the course of the method.

DISCUSSION AND RESULTS

A close examination of the guitar methods written in the early 19th Century, when the basics of the classic guitar technique were structured, reveals that each method presented a rather different point of view. Among these, methods by Carulli and Carcassi merit attention in that they clearly applied the principle of "from the easy to the difficult, from the simple to the complicated", which is one of the basic principles of musical education, to a much greater

extent than other methods. The positions, note values and tonalities presented in the methods by Carulli and Carcassi start with the simplest and easiest ones and continue with gradually increasing difficulty in terms of their rendering. In these methods, special techniques which can be rendered only after a certain level has been reached in terms of the maturity of fingers are presented in the later sections of the method structure. In conclusion, these methods can be stated to be based on a gradual structure of development extending from easily playable pieces to more difficult ones. Among the other methods addressed in this study, Molino's method is also observed to follow this approach to a certain extent. Nevertheless, even though Molino utilizes a gradual pattern in explaining the concepts of seating position and tonality in the studies he presents in the method, he ignores this approach in the utilization of note values. In addition, the introduction of tuning and arpeggio exercises without providing nearly any monophonic exercise or any exercises to secure right hand-left hand coordination emerges as a shortcoming of the Molino Method. In all the methods under study, Carcassi's Method is observed to be the method which addresses the concept of tonality in the most comprehensive fashion. The methods which allocate the largest scope to exercises aiming at reinforcing certain behaviour are the methods by Carulli and Carcassi. Molino's method can be regarded as the most comprehensive one with respect to the rendering of pieces in different tonalities. Molino's Method provides scale and cadence exercises and pieces in twelve major and twelve minor tonalities.

Although the methods by Sor, Aguado and Coste provide detailed and comprehensive information on topics pertaining to a student's introduction to the guitar, the studies presented in these methods, upon a closer examination, are observed to be higher above the preintermediate stage. Within the framework of these methods, the studies are not provided in a certain order of tonality or knowledge of positions. For instance, in the method by Aguado, after a very small number of exercises in the first position, the student is faced with much more advanced positions. The same is also true for the methods by Sor and Coste, where a rapid transition is made to the fifth, seventh and ninth positions and this constitutes a complicated process for a fresh student of the guitar, because these changes in position require a certain level of maturity in fingers. Furthermore, tonalities with one, two or three sharps and a single flat are preferred in the introductory studies of these methods. Consequently, these methods may be recognized as lacking a methodological structure where the working techniques are put into a gradual order from the simplest to the most difficult ones. These methods are more gravitated towards advanced students.

The Legnani Method attracts attention with the lack of a systematic rendering of information pertaining to the behaviours required for a fresh student of guitar playing to acquire. This method does not provide a gradual approach for progress in guitar education. Legnani preferred not to include studies aimed at reinforcing relevant behaviours. Since almost no exercise is presented in the method, it is thought to lack the qualities necessary to bring a fresh student of the guitar to more advances levels. On the other hand, Mertz's method is much similar to the method by Legnani in terms of its structure. This method is also striking in its lack of repetition-based exercises aimed at the reinforcement of behaviours. This method is observed to be a work merely providing information rather than presenting a certain pedagogical understanding.

Consequently, the method is one of the most prominent materials of classical guitar education. The selection of the method to be used is mostly in the responsibility of the teacher. Methods reflect the technical and musical approach prominent in the period when they were written. As an indispensable precondition, teachers of the classical guitar must have sufficient knowledge

on the methods they are going to apply in their lessons and interpret these methods in the light of the conditions of the period when they were written. Classical guitar teaching may be delivered by using a single method or a combination of various methods simultaneously. In fact, numerous research studies are observed to support this view. Özdek (2006: 19) states that some teachers of the classical guitar employ more than one method in their lessons. In his study on the detailed examination of methods utilized in the preliminary stage of guitar education at faculties of education in Turkey, Küçükosmanoğlu (2006) reached the conclusion that a teacher should make use of various different methods rather than sticking to only a single one by taking into consideration the background and differences of individual students. As one of the preconditions of effective and efficient guitar teaching, a teacher of the classical guitar should have information on different classical guitar methods, be familiar with their strengths and weaknesses and use these methods in a manner suitable to the preparedness levels of individual students.

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THE EFFECTS OF CREATIVE DRAMA ACTIVITIES ON SOCIAL SKILLS ACQUISITION OF CHILDREN AGED SIX

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ABSTRACT

The objective of this study is to investigate whether drama activities which are integrated into the curriculum as a part of the daily plan make a meaningful difference on the acquisition of social skills of children aged six during the preschool education or not. The experiment group consists of 19 children who attend the kindergarten class of an elementary school in Buca, Izmir during the 2008-2009 Spring semester. 10 of them were placed in the experiment group and the other 9 were in the control group. The research applied the experiment and control group design. The repetetive measurements were conducted twice, before and after the research in order to measure students' social skills. The research employed Social Skills Evaluation Scale (SSES) in order to measure students' social skills both in the research group which creative drama activities were employed and the control group which traditional method was employed. The findings revealed that there is a statistically meaningful difference between the results of the students' those who were in the experiment group and those in the control group in terms of both the scale and its subscales. The difference was found in favor of the experiment group.

Keywords: Creative drama, Social skills, Kindergarten students

INTRODUCTION

Social skills can be taught and they include both observable and non observable cognitive and affective elements which are target oriented and which change depending on the social context. In addition, social skills entail deciphering-understanding social information that take place among people as well as giving appropriate responses to the information received (Yüksel, 1999). Hersen and Eisler (1976) defines social skills as individuals' ability to conduct successful interactions in their natural environment, at school, at home and at work (cited in Bacanli, 1999). Cartledge and Milburn (1983) state in most of the definitions of social skills they are defined as skills

- a) that will provide others to give positive reactions and prevent negative reactions, will create interaction with others and they are socially approved learned behaviors
- b) which will cause others' giving positive responses and enable them avoid negative responses
- c) will create an impact on the others and they will be target oriented
- d) they will be appropriate to the situation and will chance depending on the social context
- e) they can be both observable and unobservable cognitive and affective behaviors.

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A socially skilled individual can act appropriately in his social environment in which they live, can conduct interpersonal relations and can fulfill their social requirements (Avc10ğlu, 2001). As a part of behavioral conducts, social skills enable individuals initiate and maintain positive interactions with others (Westwood, 1993; cited in Avc10ğlu, 2001). Research emphasizes the importance of children' gaining social behaviors on their school adaptation and success (Ladd and Price, 1987, cited in McClelland, Morrison, 2002; Porath, 2003). Students with low social abilities may frequently have behavioral and academic success problems and they can be refused by their peers (Cooper ve Farran, 1988; Alexander, Entwisle and Dauber, 1993; McClelland, Morrison and Holmes, 2000, cited in McClelland, Morrison, 2002). Nevertheless, students' developing acceptable social skills enables them to avoid going through negative social encounters with adults and their friends. In addition, this enables them assume appropriate social roles and improves their relations with the same age group (Gresham and Elliott, 1990).

In line with these results, it is seen that children's acquiring social skills at an early age is important. Pre school education is the most appropriate time for children's social skills acquisition process because it cultivates and encourages the development of children's social skills since it is the earliest stage of education and it is also critical for teaching social skills to this age group (Ekinci Vural, 2006).

From the point view of teaching-learning process, social skills have many positive outcomes on students. If students can apply communication, self control, adaptation and coping skills etc. effectively during their school lives, this creates positive outcomes on their school adaptation and academic success. Our educational system targets social and personal development, and yet most of the objectives focus on academic success at schools. It is imperative that individuals should develop their social skills in order to cope with problems such as violence, alienation, inefficiency in their peer relations, communicational difficulties and social isolation efficiently (Oral, 2002). Today, when teaching and learning experiences are considered the affective domain is placed less importance and that negatively affects the students' social skills development. However, it is evident that when active learning principles were fully put into practice these problems will also be solved.

The frequent problems regarding the inefficient peer relations and social skills acquisition accelerate the curriculum planing attempts which teach social skills (Çetin, Bilbay, Kaymak, 2002). It is important to employ a suitable and effective method to teach social skills. Therefore, children need activities which take place in an educational environment and which will be game-like activities that take place in close- to-natural environment (Avcioğlu, 2005). Researchers state that one of the methods that can be employed in teaching social skills is drama (Jendyk, 1981; Landy, 1982; Courtney, 1995; Avcioğlu 2005; Gülay and Akman, 2009).

Creative drama is defined as the creation of dramatic moments in the game processes and life situations during in-group interaction processes under the leadership of an expert by using the improvisation and role playing techniques etc (San, 2002). Drama is very important for the teaching-learning process and it provides students' development in the cognitive, affective and psychomotor domains and yet it is viewed as a game. Drama is an effective method to teach skills like literary development, self efficacy, understanding one's self, developing symphaty, social awareness, creativity, critical thinking, self realization, problem solving, and producing solutions to problems (Genç, 2003).

Creative drama activities can be said to have important contributions to children's socialisation and becoming a member of the society because creative drama activities take place in groups

(Heathcote and Wagner, 1990; cited in Kara and Çam, 2007). Social skills are very important for children's becoming a member of the society. During the creative drama activities children can assume different roles and experiences and go through several social roles and social problems. Especially through conflict resolution included in the drama activities social skills are developed (Sternberg, 1998). In addition, children can understand the society and the interaction patterns that take place in the society better and they can investigate the solutions to the problems that take place in these interaction patterns (Önder, 2007). They can find solutions to these problems in a safe manner and experiment in-group interaction processes with their friends who have similar problems. In addition, since creative drama provides ingroup interaction it improves interaction among the group members, enables people assume different roles and express themselves and it is an effective method to teach social skills (Çoban Çalışkan, 2007).

Landy (1982) states drama activities take place among the methods that improve social skills. During the drama activities students role play, analyse roles and work cooperatively in creative situations that require emotional control (Freeman, 2000). Creative drama environment in which such activities take place provides an atmosphere in which students will feel comfortable and not be critisized and this atmosphere fosters the development of the individuals' social skills. In creative drama self acceptance grows into accepting others during the cooperative activities and that improves social skills. Individuals with developed social skills and social acceptance are more motivated and show more socialised behaviors (Siks, 1983). In addition, creative drama includes response giving, practice to give responces, shaping responses and includes elements of cognitive restructuring and this fosters drama's ability to improve social skills (Freeman, 2000).

In the literature, several studies were done to determine drama's effects on social-emotional development of 5 and 6 year old children (Metin, 1999), individual's social development (Uysal, 1996) and on individual's level of socialization (Akın, 1993). Kara and Çam (2007), in their development and learning course, researched whether there is a meaningful difference between the creative drama and the traditional method in teaching prospective teachers to have skills to initiate and continue doing group work, skills to start a relationship and maintain it, and skills to control themselves.

This study investigates whether drama activities which are integrated into the curriculum as a part of the daily plan make a meaningful difference on the development of social skills of children aged six during the preschool education or not.

METHOD

Research Design

This study investigates the effects of using creative drama on kindergarten students' acquisition of social skills. In other words, the question whether creative drama activities, the independent variable, effect the acquisition of social skills which is the dependent variable was investigated. This is an experimental study and employs an experiment and control group design.

This design has only one factor (the independent variable) whose effects were investigated on the dependent variables. Repetetive measurements of the dependent variables were conducted. The repetetive measurements measured the students' social skills twice, once before and once after the experimental process.

Participants

The group consisted of 19 children (9 girls, 10 boys) who attended the kindergarten class of an elementary school in Buca, İzmir during the 2008-2009 Spring semester. 10 of them were placed in the research group and the other 9 were put in the control group. Kindergarten teachers voluntered to answer Social Skills Evaluation Scale (SSES) for all 19 students, both in the experiment group and in the control group.

Instrument

The research employed Social Skills Evaluation Scale (SSES) in order to measure students' social skills both in the research group which creative drama activities were employed and the control group which traditional method was employed. This scale was developed by Avcıoğlu (2003) for 4-6 age group in order to measure important skills that improve social interaction. It is a five-point Likert type scale. SSES includes social skills that 4-6 year old children should have. The skills were placed under 9 categories in the scale. These are interpersonal skills (IS), skills to manage anger behaviors (SMA), skills to cope with peer pressure (SCPP), skills to control himself (SCH), verbal explanation skills (VES), skills to accept results (SAR), listening skills (LS), goal setting skills (GSS) and skills to complete tasks (SCT). SSES has 62 items and 9 subscales. All items were organized in a positive manner. The scale includes answers such as "always does", "very frequently does', "usually does", "rarely does" and "never does". The answer "always does" gets 5 points and the answer "never does" gets 1 point. Low score indicates that the student does not have enough social skills and high score indicates that the student does have social skills. The lowest possible score is 62 and the highest possible score is 310. The subscales interpersonal skills (IS) can be the lowest 13, the highest 65; skills to manage anger behaviors (SMA) can be the lowest 8, the highest 40; skills to cope with peer pressure (SCPP) can be the lowest 9, the highest 45; skills to control himself (SCH) can be the lowest 10, the highest 50; verbal explanation skills (VES) can be the lowest 7, the highest 35; skills to accept results (SAR) can be the lowest 4, the highest 20; listening skills (LS) can be the lowest 5, the highest 25; goal setting skills (GSS) can be the lowest 3, the highest 15;) and skills to complete tasks (SCT) can be the lowest 3, the highest 15 (Avc1oğlu, 2003). The respondents read the statement in the scale first and then register the most appropriate item for the child they are evaluating. If they are asked a question regarding a skill that they have no chance of observing they do not answer that item.

A factor analysis was conducted in regard to the content and the general qualities of the scale to find out how many factors there are in the test. As a result of the analysis, factor loading value was found between .44 - .77 for the subscale interpersonal skills (IS), between .58 - .82 for the subscale "skills to manage anger behaviors (SMA)", between .52 -.87 for the subscale "skills to cope with peer pressure (SCPP)", between .45 -.66 for the subscale "skills to control himself (SCH)", between .47 -.84 for the subscale "skills to accept results (SAR)", between .41 - .67 for the subscale listening skills (LS); between .54 -.63 for the subscale "goal setting skills (GSS)", between .56 -.79 for the subscale "skills to complete tasks (SCT)"; between .45 -.65 for the subscale "verbal explanation skills (VES)". factor loading value was found between .41 - .87 for the whole scale (Avcroğlu, 2003). The reliability of the scale was tested through Cronbach Alfa coefficient (Avcroğlu, 2003). Cronbach Alfa coefficient for the whole Social Skills Evaluation Scale (SSES) and the subscales are .94 for interpersonal skills (IS), .93 for "skills to manage anger behaviors (SMA)", .93 for "skills to cope with peer pressure (SCPP)", .92 for "skills to control himself (SCH)", .93 for "verbal explanation skills (VES)", .84 for "skills to accept results (SAR)", .86 for "listening skills (LS)"; .79 for "goal setting skills (GSS)", .69 for "skills to complete tasks (SCT)"; and .97 in total.

Creative Drama Program and Its Implication

Pre-implication Process

The researchers discussed what points to pay attention to when designing a drama plan and how to use the method effectively with the Preschool Education students before the experiment during 2008-2009 Spring semester at Dokuz Eylul University, Buca Faculty of Education in the 'Teaching Applications' classes. After that, each prospective teacher was asked to prepare four drama plans for the subjects of their choice and their plans were discussed with them. Before the implication, their plans were investigated by two drama specialists and one pre school education specialist. Before the implication, prospective teachers and the specialists came together for two hours a week for two weeks. The parts that need to be improved in the plans such as the missing statements of the objectives or the wording problems with the statements of objectives, the adjustment of the difficulty level of them for the preschool students, ensuring the variety of the questions for the evaluation part etc. were determined with the prospective teachers. In addition, different drama plans developed by others were studied.

After the drama plans were finalised by the prospective teachers they became ready for the implication of their plans. The Social Skills Evaluation Scale (SSES) for young learners was employed for both the experiment and control group students as a pre test before the 6 week instructional period starts.

Implication Process

The drama plans were put into practice by the 6 prospective teachers in the kindergarten class (the experiment group) of an elementary school in Buca, İzmir. The program was followed by each prospective teacher for 4 days a week for 6 weeks. In the literature it is stated that children were able to learn how to use social skills during a 3-5 times a week social skills instruction (Akkök, 1996). The experiment group received 6 week instruction and one prospective teacher each week followed his drama program and as a result a total of 24 drama activities took place. The implications of the plans developed by each prospective teacher were observed and meetings were held with each prospective teacher for one hour a week for 15 minutes after each activity. During these meetings problems regarding absence of clear directions, motivating children to drama activities, following the steps in the plan etc. were discussed and some suggestions were made to ensure their developments.

Every activity which took place in both the experiment and the control groups was observed by one of the researchers and was made sure that the process is maintained properly. It was expected that the creative drama activities in the program would positively affect the social skills development of children aged 6. Children in the control group were given activities that were stated in the daily plans for the same length of time. The drama activities did not go over 30 minutes including the evaluation part conducted at the end of the activity. During the process, first the drama activity took place and then questions regarding definitional, affective and cognitive/experience level were asked (Önder, 2007). "Social Skills Evaluation Scale" for young children was applied to kindergarden students in the experiment and control groups by their teachers at the end of the 6 week training period and the post test results were gathered.

RESULTS

The findings are revealed in this part. Data was analysed through the Shapiro-Wilk test which compares the measures against the normal distribution and t- test was conducted.

Table 1. The pretest results of the experiment and control groups according to Shapiro-Wilk for normal distribution

The scale and subscales	Groups	n	Mean	Standard Deviation	Shapiro- Wilk	p
Interpersonal skills (IS)	Experiment	10	37,7	6,63	0,96	0,80
	Control	9	35,7	4,06	0,93	0,47
Skills to manage anger behaviors	Experiment	10	23,6	2,63	0,96	0,78
(SMA)	Control	9	22,3	3,32	0,91	0,31
Skills to cope with peer pressure	Experiment	10	26,0	3,94	0,95	0,68
(SCPP)	Control	9	22,0	3,74	0,93	0,51
Skills to control himself (SCH)	Experiment	10	33,2	4,51	0,94	0,57
	Control	9	30,4	3,57	0,98	0,95
Verbal explanation skills (VES)	Experiment	10	19,7	3,95	0,86	0,06
	Control	9	17,1	2,93	0,90	0,24
Skills to accept results (SAR)	Experiment	10	13,0	2,00	0,85	0,06
	Control	9	11,4	2,19	0,90	0,23
Listening skills (LS)	Experiment	10	17,0	2,54	0,87	0,09
	Control	9	13,2	2,11	0,92	0,39
Goal setting skills (GSS)	Experiment	10	9,30	1,25	0, 90	0,08
	Control	9	7,7	1,12	0,78	0,06
Skills to complete tasks (SCT)	Experiment	10	10,5	1,18	0,86	0,07
	Control	9	7,7	1,12	0,90	0,26
Whole scale	Experiment	10	190,0	21,75	0,93	0,45
	Control	9	170,7	18,79	0,93	0,45

p>0,05

Table 1 shows that the value of p for the experiment and control groups that was found after the Shapiro-Wilk test is greater than 0.05. This result shows that the data gathered from the pre test results of the experiment and control groups shows a normal distribution. Therefore a t-test was conducted to determine the difference between the means of the experiment and control groups. The results are displayed in Table 2.

As Table 2 reveals, there is a difference between the pre test results of the experiment and control groups for the "Skills to cope with peer pressure (SCPP), Listening skills (LS) ve Goal setting skills (GSS)" in favor of the research group. There is not any statistically meaningful difference for the rest of the subscales. In general there is not any meaningful difference between the experiment and the control groups in the scale, and yet the difference is close to the meaningful difference. Therefore when students' final social skills scores were evaluated their preliminary social skills scores were calculated as the control variable and one factor covariance analysis was conducted. But initially, the Shapiro-Wilk test was conducted to check whether the posttest results of the experiment and control groups show a normal distribution or not. The results are displayed in Table 3.

Table 3 shows that the value of p for the experiment and control groups that was found after the Shapiro-Wilk test is greater than 0.05. This result shows that data has a normal distribution according to the post test results of the experiment and control groups. The groups' arithmetic mean and the standard deviation scores and corrected post test mean scores basing on the pre test score means and standart error scores are displayed in Table 4.

Table 2. The t test results for the comparison of pretest results of the experiment and control groups

The scale and subscales	Groups	n	Mean	Standard Deviation	t	p
Interpersonal skills (IS)	Experiment	10	37,7	6,63	0,80	0,44
	Control	9	35,7	4,06		
Skills to manage anger behaviors	Experiment	10	23,6	2,63	0,93	0,37
(SMA)	Control	9	22,3	3,32		
Skills to cope with peer pressure	Experiment	10	26,0	3,94	2,26	0,04*
(SCPP)	Control	9	22,0	3,74		
Skills to control himself (SCH)	Experiment	10	33,2	4,51	1,46	0,16
	Control	9	30,4	3,57		
Verbal explanation skills (VES)	Experiment	10	19,7	3,95	1,61	0,13
	Control	9	17,1	2,93		
Skills to accept results (SAR)	Experiment	10	13,0	2,00	1,62	0,12
	Control	9	11,4	2,19		
Listening skills (LS)	Experiment	10	17,0	2,54	3,51	0,00*
	Control	9	13,2	2,11		
Goal setting skills (GSS)	Experiment	10	9,30	1,25	2,99	0,01*
	Control	9	7,7	1,12		
Skills to complete tasks (SCT)	Experiment	10	10,5	1,18	0,49	0,63
_	Control	9	7,7	1,12		
Whole scale	Experiment	10	190,0	21,75	2,06	0,06
	Control	9	170,7	18,79		

^{*}p<0,05

Table 3. The posttest results of the experiment and control groups according to Shapiro-Wilk for normal distribution

The scale and subscales	Groups	n	Mean	Standard Deviation	Shapiro- Wilk	p
Interpersonal skills (IS)	Experiment	10	54,8	7,15	0,93	0,39
	Control	9	40,3	4,36	0,91	0,31
Skills to manage anger behaviors	Experiment	10	33,9	2,42	0,93	0,44
(SMA)	Control	9	24,2	3,35	0,96	0,78
Skills to cope with peer pressure	Experiment	10	37,7	3,06	0,89	0,18
(SCPP)	Control	9	26,1	1,27	0,87	0,12
Skills to control himself (SCH)	Experiment	10	42,8	4,71	0,92	0,31
	Control	9	33,7	5,50	0,89	0,15
Verbal explanation skills (VES)	Experiment	10	28,9	2,18	0,91	0,28
	Control	9	19,1	2,26	0,85	0,08
Skills to accept results (SAR)	Experiment	10	19,5	1,27	0,88	0,15
	Control	9	13,7	2,35	0,87	0,07
Listening skills (LS)	Experiment	10	22,5	2,22	0,89	0,15
	Control	9	15,8	3,15	0,84	0,06
Goal setting skills (GSS)	Experiment	10	13,2	1,14	0,85	0,07
	Control	9	9,33	1,00	0,92	0,36
Skills to complete tasks (SCT)	Experiment	10	14,9	0,32	0,87	0,13
	Control	9	11,6	2,40	0,87	0,12
Whole scale	Experiment	10	268,2	18,76	0,92	0,40
	Control	9	193,8	17,45	0,94	0,62

p>0,05

Table 4. The Groups' Arithmetic Mean And The Standard Deviation Scores And Corrected Post Test Mean Scores Basing On The Pre Test Score Means And Standart Error Scores

The scale and subscales	Groups	n	Mean	Standard Deviation	Corrected Mean	Standart Error
Interpersonal skills (IS)	Experiment	10	54,8	7,15	54,11	1,47
	Control	9	40,3	4,36	41,10	1,55
Skills to manage anger	Experiment	10	33,9	2,42	33,73	0,91
behaviors (SMA)	Control	9	24,2	3,35	24,42	0,96
Skills to cope with peer	Experiment	10	37,7	3,06	37,12	0,72
pressure (SCPP)	Control	9	26,1	1,27	26,75	0,77
Skills to control himself	Experiment	10	42,8	4,71	41,55	1,08
(SCH)	Control	9	33,7	5,50	35,06	1,15
Verbal explanation skills	Experiment	10	28,9	2,18	28,34	0,52
(VES)	Control	9	19,1	2,26	19,74	0,55
Skills to accept results (SAR)	Experiment	10	19,5	1,27	19,23	0,57
	Control	9	13,7	2,35	13,97	0,60
Listening skills (LS)	Experiment	10	22,5	2,22	21,11	0,76
	Control	9	15,8	3,15	17,32	0,81
Goal setting skills (GSS)	Experiment	10	13,2	1,14	12,68	0,26
	Control	9	9,33	1,00	9,92	0,27
Skills to complete tasks (SCT)	Experiment	10	14,9	0,32	14,99	0,45
	Control	9	11,6	2,40	11,45	0,48
Whole scale	Experiment	10	268,2	18,76	262,22	4,25
	Control	9	193,8	17,45	200,42	4,51

As seen on Table 4, the mean scores of the post test results of the experiment groups are higher than the mean scores of the post test results of the control groups. In order to determine whether this difference is meaningful covarience analysis was conducted. The ANCOVA results are displayed in Table 5.

Table 5 shows that covarience analysis results reveal that when the pre test results are under control, the grouping major effect is meaningful in terms of the post test results of the groups. There is a statistically meaningful difference between the post test scores of the experiment and control groups for both the whole scale and the subscales. The difference is in favor of the experiment group.

Scale and	Source	Sum of Squares	sd	Mean Square	F	Р
subscales	Bource	Sum of Squares	54	Wear Square	•	•
Interpersonal	Pretest	271,135	1	271,135	12,742	0,003
skills (IS)	Group	773,056	1	773,056	36,329	0,000*
(-2)	Error	340,465	16	21,279	00,025	0,000
	Total	1602,947	18	,		
Skills to manage	Pretest	12,833	1	12,833	1,584	0,226
anger behaviors	Group	390,635	1	390,635	48,218	0,000*
(SMA)	Error	129,622	16	8,101	-, -	- ,
` /	Total	586,105	18	,		
Skills to cope with	Pretest	23,528	1	23,528	5,124	0,038
peer pressure	Group	391,357	1	391,357	85,238	0,000*
(SCPP)	Error	73,461	16	4,591	,	,
,	Total	733,158	18	,		
Skills to control	Pretest	264,075	1	264,075	23,80	0,000
himself (SCH)	Group	176,926	1	176,926	15,95	0,001*
, ,	Error	177,525	16	11,095	,	,
	Total	836,737	18			
Verbal	Pretest	43,721	1	43,721	17,459	0,001
explanation skills	Group	304,472	1	304,472	121,583	0,000*
(VES)	Error	40,068	16	2,504	,	,
` ,	Total	537,684	18	,		
Skills to accept	Pretest	10,066	1	10,066	3,325	0,087
results (SAR)	Group	113,546	1	113,546	37,509	0,000*
	Error	48,434	16	3,027	ŕ	ŕ
	Total	219,684	18			
Listening skills	Pretest	56,097	1	56,097	13,207	0,002
(LS)	Group	39,643	1	39,643	9,334	0,008*
	Error	67,958	16	4,247	,	,
	Total	338,105	18			
Goal setting skills	Pretest	11,160	1	11,160	21,157	0,000
(GSS)	Group	23,589	1	23,589	44,719	0,000*
	Error	8,44	16	0,527	ŕ	ŕ
	Total	90,421	18			
Skills to complete	Pretest	14,761	1	14,761	7,298	0,016
tasks (SCT)	Group	58,987	1	58,987	29,164	0,000*
	Error	32,362	16	2,023	,	*
	Total	100,105	18	•		
Whole scale	Pretest	3020,857	1	3020,857	18,703	0,001
	Group	14470,715	1	14470,715	89,592	0,000*
	Error	2584,299	16	161,519	,	•
	Total	31840,947	18	*		

^{*}p<0,05

DISCUSSION

The results of the instructional activities that teach social skills to pre school children reveal that they are effective for developing social skills of children (Unutkan, 1998; Powless ve Eliot, 2002; Avcıoğlu, 2003). The research findings of this study also support that drama activities, one of the effective methods to foster the development of social skills, also increase the social skillss levels of the students.

Metin (1999) conducted a research on the effects of drama on social-emotional development of the 5-6 year old children. His findings revealed that drama activities create meaningful differences on social-emotional development of the children. Uysal (1996) made a research on the effects of drama activities on the social development of the 5-6 year old children who attend kindergarten. Uysal worked with 48 children whom never received any drama instruction. The children were put into two groups of 24 to make up the research and control groups. The research group received creative drama program for 12 weeks. The teachers filled an observation form from the Portage Early Childhood Education Program's Social Development Control List, the part about the social development of children aged 61-72 months, for each child in the research and control groups prior to and after the instruction. The findings revealed that drama made positive contributions to the social development of children in the research group. Coban Calışkan (2007) researched about the effects of creative drama activities on the development of social skills levels of a group of children who have social skills problems and with their mothers. The research applied a controlled pre test post test design. The children were put into the research and control groups on the basis of having similar socio-economic level and gender. The same creative drama activities were given to the mothers of the children in the research group and this was expected to be a reinforcement for their children's learned skills. The findings displayed that there is a meaningful difference in the Walker-McConnell Scale of Social Competence and School Adjustment test scores of the students in the research group after the drama instruction in 'total', 'teacher-preferred social behavior', 'peer preferred social behavior', and 'school adjustment' scores whereas no meaningful difference was stated in the scores of the control group.

In his study Uşaklı (2006) conducted a research on the effects of the drama based group guidance on the peer relations, entrepreneurship and self respect of 5th grade students. He followed a drama based group guidance program that was based on friendship, entrepreneurship and self respect themes with the students in the research group for 16 weeks. The findings revealed that the drama based group guidance program changed the friendship relations of the children and increased their entrepreneurship and this effect was found permenant. Akın (1993) conducted a research on the effects of creative drama on increasing the socialisation levels of the 3th grade students. He gave the sociometric test to the research ve control groups in pre test post test design. The results showed that the level of socialisation of the 3th grade students differed meaningfully after a 10 week instruction. Kocayörük (2000) researched about the effects of drama on increasing the social skills of the 6th, 7th and 8th grade students and applied Social Skills Scale. He applied drama practise for one and a half hours, every day, for ten days. The results showed that drama activities were found effective in increasing the level of social skills of the students. Freeman (2000) conducted a research on the effects of creative drama on self concept and social skills of the 3th and 4th grade students. In his research The Solomon four group design was applied. Drama activities took place one day a week for 40 minutes for 18 weeks in the research group. The results showed that drama activities did not make a meaningful difference on the self concept and social skills of the students.

Uzamaz (2000) found that social skills training has positive effects on interpersonal relations of the students and Yukay (2003) found that it is effective on developing the social efficacy and self concept of the students. Özdemir (2003) showed that creative drama lessons are effective on developing the social skills of the students. Beales and Zemel (1990) showed that drama activities have positive contributions to students' social maturity levels. İpek (1998) showed that drama in education is effective on the social development of mentally retarded children. Yassa (1999) showed that creative drama activities are effective on developing the social interaction and self confidence.

RESULTS

Creative drama's positive effects on social skills levels of pre school students who attend kindergarten were displayed by many studies and drama's integration to daily plans and its being practiced is very important. Creative drama activities are amongs the methods that develop social skills (Jendyk, 1981; Landy, 1982; Courtney, 1995; Avc10ğlu 2005).

In this research the instructional support given to prospective pre school teachers regarding their drama application skills was found to have positively contributed to the social skills of the kindergarden students in which the prospective pre school teachers made drama applications. From this respect, it is thought to be important for pre school teachers to increase their efficiency in planning and putting creative drama activities into practice. In addition, it can be said that teachers' being more self efficient in drama may make them more willing to apply the drama method. At this point, it is important that prospective pre school teachers be aware of the importance and the positive contributions of creative drama activities on the development of social skills and many other skills while they are receiving education. By knowing the contributions of creative drama, it is assumed that prospective pre school teachers may be more willing to apply the method.

This study was conducted on 6 year old children, therefore it is suggested that the effects of creative drama activities on the development of social skills be researched on children of other pre school age groups. Also different studies about creative drama's effects on the other characteristics of pre school children can be conducted. It is hoped that the findings of this research will shed light on new studies about the creative drama and social skills acquisition of pre school children.

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TEACHING ACTIVITIES DIRECTED TOWARDS THE BEGINNING STAGE IN PIANO EDUCATION: VISUALIZING, DRAMATIZING, ASSOCIATING WITH LIFE

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ABSTRACT

Due to its technical and musical features, the piano is the head of the suitable instruments for young children who take their first step towards a systematic music education. When taking into account young children who have many interesting, rich stimulants in their environment nowadays, instead of traditional teaching methods, it is considered necessary that piano education is changed into a more enjoyable education which provides concentration and permanent learning. With this approach, it is believed that piano education which develops and uses new teaching tools, is visualized and made more interesting with games. Also, it is believed that it presents samples associated with life, concretizes abstract information and satisfies every kind of learning need of the student to provide a helpful educational process. With this belief, in this study, the introduction of activities providing a permanent learning and making piano playing enjoyable for the young piano learner is aimed at.

Towards the specified aim in this study, the expected features of a piano teacher in these days' conditions have been specified, note teaching at the beginning stage of piano education, visualization that can be used in the technical development and musicality development stages, and dramatization and activities directed towards associating with life are arranged. The contribution to learning provided by the mentioned activities used in young piano learners' piano education is examined with the observations of the researcher.

The study with its presented activities is seen important in guiding teachers who are commencing piano teaching and with this, it is also considered important in bringing upon a new approach towards the development of different activities.

Key Words: Piano education, Visualizing, Dramatizing, Associating with life

INTRODUCTION

Due to its prepared sounds, appropriateness to the structure of the hand and similar technical features, the piano is considered to be the head of the suitable instruments for young children who are taking their first step towards a systematic music education.

Experts have stated various views related to the beginning age of playing the piano. Although the views of most music teachers show variation according to the child's interest, talent, cognitive and physical development, they unite with the view that generally ages 5 or 6 are appropriate. It is specified that the small muscles of children develop (http://egitimevim.blogcu.com/okul-oncesi-donem-bedensel-ve-motor-gelisim/4872407) and the eye-hand coordination reaches a high level (M.E.B: 2007) at these ages. Therefore, children

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are able to use both hands independently to play the piano. Also, their concentration span has extended, they have gained a study habit through school discipline and they have reached a level in which they can carry some responsibilities.

The present day pedagogy understanding is that piano education at the beginning level directed towards the mature student is a scientific process and that during this process scientific methods are benefited from (Gültek). While the piano teacher, with this consciousness, provides the pianistic development his/her young piano learner needs, it is required that he/she keeps in mind the developmental features of the age group in the very first lesson and that he/she knows the importance of this during the developmental process.

Ömür (2004) has set forth that according to Bossing, a good and successful teacher in terms of piano teaching should enjoy his/her profession and be informed, well educated, disciplined, hardworking, tolerant, patient and creative. It is believed that every piano teacher should have all the qualities specified.

It is necessary that instrument training is carried out in a more interesting dimension because the time children in the present day especially Turkish children spend for games and extracurricular activities including instrument training are limited as a result of the intensities of the current education system and the technological products as well as the rich stimuli found in their environment. With this approach, the creativity feature of a piano teacher in Ömür's classification takes more importance in instrument training. Using creativity in educational identity, giving examples directed towards the learner's interest, and providing examples from daily life and the environment to make learning interesting and appealing increases the professional success of a teacher (Ömür, 2004).

Burton (1989) defines creativity as "combining known factors with new ways in order to gain new results – new product, new thinking and comprehending method, new performance method". The piano teacher should gain new teaching tools by acting according to Burton's statement and combining traditional teaching methods with new approaches in order to permanently keep the attention of his/her very young piano beginner and to maintain the continuity of education. Also, he/she should make the lesson interesting for children by getting them to achieve the developed tools through games because Otacioğlu (2008) states that playing games is the main learning situation for children. The teacher should provide the opportunity for the student to concretize abstract concepts through active participation. In the present day, it is necessary that piano education is dealt with a modern approach with examples from daily life and that it is visualized through games. A piano lesson dealt with this approach is thought to satisfy the learning style of every student in terms of visual, auditory and kinesthetic/tactile learning (Boydak, 2001) as Camp states (1992) 'Learning to play the piano involves the mind, body emotions and the sense of sight, hearing and touch'.

Dr. Martha Baker Jordan (2005), who emphasize the similar idea, state that teaching aids with their purposes of use will help piano teachers to be more successful and professional.

Towards the explanations mentioned above, as Jordan emphasizes, the use of tools set forth in note, technical and musicality teaching, visualization, dramatization and activities related to associating with life are outlined below in order to make piano teaching enjoyable and more productive.

Table 1. Teaching aid and teaching purpose

Table 1. Teaching and and teaching purpose	
Teaching Aid	Teaching Purpose
Magnetic Note Boards	Intervals, note names, chords
Grand staff note board with single movable note	Instantaneous note recognition
Flash cards for every new element taught Grand staff board on which chalk or dry markers can be used	Illustrating all elements taught
Music dictionaries and resource books	Reinforcement of knowledge of history and theory
Board Games	Motivation and knowing more about music

1. Activities which can provide easy note learning at the beginning stage of the piano:

While preparing the children to play the piano in an appropriate technical way in piano lessons, note teaching should be carried out in parallel with these studies. The treble and bas clefs are used while playing the piano. The lines and intervals of the staff vary according to the note clefs arranged above them. This is thought to form difficulty for young children at the beginning stage of the piano. The places of the notes which have different values on the staff in both clefs are learned one by one and are reinforced with small tunes to take place visually with time in the mind. By passing this process, the student who recognizes the notes of the staff at a glance can play the melody consisted of different note values lined consecutively in a shorter time. The learner who succeeds in achieving the melody in a short time enjoys the work he/she does, and therefore it is believed that studies gain continuity. The activities set forth in order to recognize the notes in a short time are outlined below:

1.1 The note in the middle line of the staff

In note teaching, when the student knows what the notes are in both clefs (B in the treble clef and D in the bas clef) on the 3rd line which is exactly in the middle of 5 lines of the staff, it is easier for him/her to find the notes on the other lines of the staff. In this context, cards are prepared by drawing a 'sinek' ('sinek' means the animal 'fly') picture on the 3rd line of the B clef in order to remind the learner of the 'si' note (this note is the B note), and also a 'reçel kavanozu' (means 'jam jar') is drawn on the 3rd line of the F clef to remind him/her of the 're' note (this note is the D note). It is shown like it's a tale in which the fly is waiting to enter the jam jar.



Picture 1: Cards formed by making use of objects that remind the notes on the 3rd line of the G and F clefs.

1.2 The relationship of the note on the middle line with the other notes

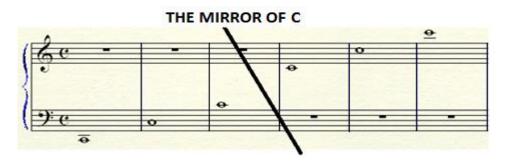
The relationship between the other two consecutively arranged notes and the learned note on the middle line in the above activity is pointed out on another prepared card. Therefore, finding quickly the other notes left in between is aimed at.



Picture 2. Cards which show the relationship between the note on the middle line and the other consecutively arranged notes.

1.3 The mirror of C

As it is shown below, it is pointed out that by putting an imaginative mirror between the great octave, small octave, first, second and third octaves C notes found on the staff, the notes reflect each other. With this method, the aim is to easily establish the places of all the required C notes of the staff through visualization in the learner's mind.



Picture 3: Mirror reflecting all the C notes

1.4 Jumping game on the staff

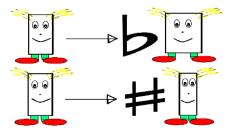
5 pieces of string which are equal in length are put on the floor of the classroom to form the lines of the staff, and with a new string a treble clef or a bas clef is put on the staff. During the game, the child jumps on the strings or in between them to identify the place of the note he/she is asked on the staff. Therefore, learning is aimed to be enjoyable by including all the three learning styles, auditory, visual and kinesthetic.



Picture 4: A staff prepared with 5 pieces of wool.

1.5 Sharp - Flat Cards

The term flat which lowers the note in front of it a half tone and the term sharp which raises the note usually confuse the children at the beginning stage. The prepared cards below which show the note that is lowered (in Turkish language it is said to be 'thicken' the note) with a flat and the note that is raised (in Turkish language it is said to be 'thinning' the note) with a sharp are used to give the student the opportunity to concretize abstract information.



Picture 5: The term flat which lowers the note in front of it and the term sharp which raises the note in front of it.

1.6 Walking Game According to the Values of the Note

When the name of a note is said, the child is asked to clap his/her hands according to a crotchet as he/she takes a step to walk. This reinforces the value of every note, and aims to get the student to feel the rhythm physically in the game.

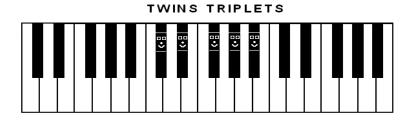
1.7 Game and Cards Directed Towards Staff - Keyboard Relationship

As notes go up on the staff, they become higher. As they go down, they become lower. Piano keys produce a higher sound towards the right, and a lower sound towards the left. On the piano, the right side, where the higher sounds are, is called the upper side and the left side, where the lower sounds are, is called the lower side. This is in parallel with the notes arranged on the staff. At the beginning stage of piano education, young learners confuse the upper and lower sides, so a bird is drawn above a tree for higher sounds and a lion is drawn below this tree for lower sounds on a card in order to avoid this confusion. By explaining this in an epic way, the students are taught that the higher sounds are at the top and that the lower sounds are at the bottom. With the prepared visuals, the aim is to get the upper and lower part of the piano keyboard to be comprehended easily.



Picture 6. The card which gets the sides of the piano to be comprehended.

It is important that the student finds the piano key that corresponds with the note of the staff. To get this comprehended in a short time, it is necessary that attention is paid to the arrangement of the black keys. It is appropriate to identify the dual black keys as "twins" and the triple black keys as "triplets". The twins and triplets make the process easier when specifying which piano key belongs to which sound.



Picture 7: Twins and Triplets formed with the black keys

Cards showing the treble clef, bas clef and staff have been prepared to find the piano key which corresponds to a note on the staff. The student is asked to place the backgammon counter or button or a similar object put on the lines and intervals of the staff on a corresponding key. The aim of this game is to quickly find the related key with the note on the staff.

One of the most important acts in piano playing that needs to be gained is the comprehension that the piano keys have a related note on the staff, and that once the note on the staff has been comprehended, the required finger is placed quickly on the key which corresponds to that sound. This act needs a certain time in order to be gained appropriately. However, it is believed that the enjoyable activities will shorten the process of acquisition. Thus, the student is asked to quickly place the expected finger on the key according to the prepared card which shows the finger number of the note, and is also asked to vocalize this sound. By playing this game, it is believed that the student will quickly understand the note and instantly hit the key with the expected finger.

2. Comparisons which can help in forming the main piano playing technique at the beginning stage of the piano

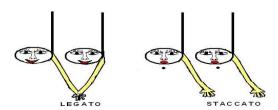
The technical development in piano playing is carried out in parallel with musical development as well as note teaching (Watermann, 1983). According to Gasımova (2010), one of the difficulties the piano teacher comes across is getting the student to gain technical skills. Gaining the practice of technical skills is evaluated as the most important aim in all the stages

of music education (Gasımova, 2010). Technical skills begin with the appropriate placement of the finger, hand, wrist and arm on the keyboard. It is necessary that every practice is done comfortably in order not to have contractions, pains and disabilities (Gökbudak and Tutun, 2005). Producing qualitative sound should form the primary principle of technical studies. The first step for a qualitative sound production is trying to capture the best colour by feeling that sounds can be produced in various tones just like a colour can have different tones. The correct positioning of the finger, hand, wrist, forearm and upper arm on the keys with qualitative sound production are the directly proportional elements in piano playing. Positioning correctly the hands on the keys is frequently likened to having a ball or an egg in the palm, and the position of the fingers on the keys is likened to a toothpick broken in two areas. The position of the wrist according to the white keys must be paid attention to by placing a book under the wrist to keep it in line with the white keys. The shape the thumb and index finger form is similar to the letter C. The fingers need to be placed on the keyboard in parallel with the black keys. As it is seen in the picture, the aim is to get the fingers in parallel with the black keys by drawing a happy face on the 2nd finger of each hand and having these hands look at each other.



Picture 8: The position of the hand on the keyboard.

The term legato is illustrated with a movement in walking in which one leg touches the ground before the other moves upwards. This is at the stage in which the learned places of the notes on the staff are vocalized with the correct hand position. The student comprehends this act by walking with the teacher. When the student moves onto playing after the walk, the aim is to get him/her to play with better legato. The exact opposite of this is staccato in which the dots above or below the notes () symbolizing the staccato are likened to a pin, and the withdrawal of the finger from the key is likened to a wince because of a pinprick. The difference between the two techniques is comprehended by using this comparison: Staccato is like a dripping tap whereas legato is like a tap that flows continuously. Also in the following picture, the two notes which are hand in hand visualize legato, and the separate notes visualize the staccato (Onuray, 1998)



Picture 9: Legato and Staccato

The hand is likened to a bridge during the transfer of the fingers when playing the scales and the thumb which goes under this bridge is likened to a train. The bridge slides on the track after

the train has completed its passing under the bridge. The aim of expressing the movement in this way is to get the act to be comprehended easily.

3. Comparisons that can easily reinforce the musical expressions during the musical development process:

It is seen necessary that the places of the notes on the staff, the values of notes and which piano key is related to which note are learned gradually. Also, it is important that musical expressions are learned at the same time with the start of producing qualitative sound using the correct technique, and that these expressions are applied to the work of art.

Dynamics such as *piano* "soft", *mezzo-forte* "moderately loud" and *forte* ""loud" can be comprehended by playing the piano, and also by saying in a low voice "I'm talking piano now" and at a medium-pitch "Come on, you talk mezzo-forte". In addition, these expressions can be taught through a game by adding physical movements like stepping lightly on the floor and saying "Let's walk piano" or stepping strongly and saying "Let's walk forte". These terms are reinforced through various activities by tapping different parts of the body such as the palm. For example, the palm is tapped softly when the term piano is said and it is tapped stronger when the word forte is expressed. The term crescendo is aimed to be comprehended with a sentence that begins as a whisper and gets louder, and the complete opposite term diminuendo is aimed to be understood with the reverse action.

The terms used for tempo such as andante (slow), moderato (medium) and allegro (fast) are aimed to be comprehended by walking at different speeds or making comparisons with transport. These matches can be made: andante with a bicycle, moderato with a car and allegro with a plane. The term accelerando is aimed to be comprehended through a walk that begins with slow steps and gets faster, and the complete opposite term ritardando is aimed to be understood with the reverse action.

RESULT AND RECOMMENDATIONS

In this study, note teaching for children at the beginning stage of the piano and activities which can be useful during the technical and musical development process have been presented. The mentioned activities, games in piano teaching, samples associated with life concretizing abstract concepts through visualization and visual, auditory, motional and sensual activities are prepared to diversify learning.

Examples of cards which have been presented above, games and comparisons have been used for ten years and are being used by a researcher at different times in amateur piano education for young children who have different personalities. The traditional practices used before have provided the chance to compare both methods. At the end, it has been observed that cards and games used in the note teaching stage in piano education help young piano learners acquire the places of the notes on the staff in a much shorter time and more correct answers are given by these children when asked the places of these notes. The student who can recognize the notes at a glance is able to reach the tune easier, and therefore shows quicker progress in piano education. It can be said that the aimed acts are gained in a shorter time and while using the traditional methods, learning becomes more permanent when the suggested activities are used. In comparison with the traditional methods, it has been observed that young piano learners concentrate more when cards and games are used in piano education.

In summary, in this study, it has been observed that students enjoy the lesson, their concentration increases and learning becomes permanent when the presented activities are used during the process of educating.

Many musical acts can be gained by young children through various methods. Activities of which samples have been given can be increased with diversification. The important thing in piano education is determining the direction of education by identifying the age group features and the individual characteristics of every child.

It is being suggested that through diversification the observed activities which are highly beneficial in piano teaching be collected into a guide book for piano teachers. By increasing the suggested activities in this way and presenting them to piano teachers is seen to be important in terms of the activities being reachable.

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PRESERVICE SCIENCE TEACHERS' OPINIONS AND ETHICAL PERCEPTIONS IN RELATION TO CLONING STUDIES

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ABSTRACT

Cloning is a reproductive method that raises many important ethical questions. As our future science teachers, preservice science teachers will experience with cloning technologies in their lessons and also part of the society, many of them may become decision makers related these issues. Therefore preservice science teachers need have scientific literacy about cloning studies and also they need to be able to evaluate critically the potential benefits, risks and ethical implications of these technologies.

Considering the importance of these issues, the aim of this study is to find preservice science teachers' ethical peceptions and knowledge in relation to the application of cloning technologies. 112 preservice science teachers attended to this study, their perceptions and knowledge were assessed using dilemmas and questions. It was found that most of the preservice science teachers get their knowledge on cloning technology from informal resources, their knowledge were found limited and they found cloning as risky. In addition, their opinions and reasons related to the dilemmas were differentiated.

Keywords: Cloning technology, Preservice science teachers, Ethical concerns.

INTRODUCTION

In recent years there has been a rapid increase in the development of biotechnological studies all over the world. Genetically modified foods, treatment of genetic disorders, stem cell research, gene theraphy, cloning and environmental issues are some of the biotechnological studies. These studies provide comfort and benefit for mankind, however they also give rise to concerns about ethics and moral issues.

Issues related to biotechnology, can be classified together as "socioscientific issues", and it means that all aspects of science are inseparable from the society from which they arise. Socioscientific issues are typically contentious in nature, can be considered from a variety of perspectives, do not possess simple conclusions, frequently involve morality and ethics (Sadler & Zeidler, 2003), and also describe societal dilemmas with conceptual, procedural or technological associations with science (Sadler, 2004).

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Socioscientific issues have become increasingly more important in the field of science education to make science learning more relevant to students' lives (Cajas, 1999; Pedretti, 1999); to improve dialogical argumentation (Driver, Newton, & Osborne, 2000; Zohar & Nemet, 2002), to evaluate scientific data and information (Jimenez-Aleixandre, Rodriguez, & Duschl, 2000; Kolsto, 2001) and to improve scientific liretacy (Pedretti & Hodson, 1995). Citizens of all ages need a high level of scientific litearcy to address socioscientific issues (Dawson and Schibeci, 2003) and also they need to make ethical decisions on how they use science and technology and its products (Macer, 2004). Studies suggested that society needs to be able to evaluate critically the potential benefits and risks of scientific advances (Dawson, 2001; Dawson and Schibeci, 2003). University students are also experienced with socioscientific issues in their lessons and as they are part of the society, in some situations many of them become position of decision makers on these issues.

In literature, many studies have been done to determine students' knowledge, attitudes towards biotechnology. Chabalengula et al. (2011) searched 88 elementary education preservice teachers' understanding of biotechnolgy and its related processes. The results of this study indicated that preservive teachers had limited understanding of biotechnology and its related process. In addition, it was found that the majority of the preservice teachers provided poor defiinitions, explanations and examples of biotechnology, genetic engineering and genetically modified foods. Concannon, et al. (2010) also studied with 96 undergraduate non-science majors' to find their conceptions of stem cells, stem cell research and cloning. Participants were asked questions related to these issues before and after instruction which was aimed to help students construct scientific ideas and enhance their reasoning about socioscientific issues. It was found that overall, students' understandings of stem cells, stem cell research and cloning increased. For example, on the post test, it was found that students gained knowledge concerning the age of an organism related to the type of stem cell it posseses. Balas and Hariharan (1998) explored the knowledge and attitudes of the general population contained 156 individuals, 76.3% of which were associated with a college or university regarding cloning. They found that attitudes toward cloning were not correlated to gender, however, occupation and academic association were strongly correlated to attitudes. Unlike these studies, Dawson (2007) examined development and understandings and attitudes about biotechnology process as students progress through high school by doing cross sectional case study. She found that most students approved of the use of biotechnolgy processes and determined that overall, 12-13 year old students' attitudes were less favourable than older students regardless of the context.

Biotechnology raises various socioscientific issues with regard to ethics, the level of acceptable risks and usefulness of the new products (Reiss & Straughan, 1996). Therefore young people need to be informed, not only about the practical applications of biotechnology, but also they need to appreciate the social and bioethical implications. In that way, they can make wise personal choices and contribute to public debate in the future, and they can also become informed decision makers (Dawson & Taylor, 2000; Dawson & Schibeci, 2003). Dybas (2003) defined bioethics as below;

"Bioethics is the symbiotic relationship between biology and ethics, encompasses everything from well-known debates on the use of stem cells in medicine, to the impact of terrorism and war on Earth's environment, to how human populations alter the landscapes around them, to how research into these questions is conducted and results are shared". (p.798)

Macer called the term of bioethics more simplistic way. According to Macer, bioethics is the love of life. This researcher mentioned the three ways to view bioethics; descriptive bioethics, prescriptive bioethics and interactive bioethics and stressed that developing and clarifying

prescriptive bioethics allow us to make better choices, and choices that we can live with, improving our life and society (http://www.biol.tsukuba.ac.jp..).

Three general moral principles have proved to be serviceable as a framework of principles for bioethics: respect of autonomy, beneficence and justice. These principles can provide a framework which begin to reason about problems in bioethics (Beauchamp and Kahn, 2008). In the area of ethics, cloning has created serious dilemmas such as the morality behind the use human embryos for scientific purposes, the disposal of unused embryos, the lack of safe scientific measures to support the techniques used. Moreover considering that a clone is a person and not a thing, he/she has all the rights inherent to human being. He/She will have, as any other individual, judicial personality, different from the person who gave him/her the genetic material, in other words, he/she will become a new individual with its own rights and obligations (Costa et al, 2006).

Of the many controversial issues in science, advances reproductive technologies have a personal relevance for students. Students are curious about these technologies and require guidance to comprehend the impact of these technologies in their lives (Russo, et al.,2004). On the other hand, cloning technologies is a serious matter in reproductive technologies. Especially, the aim of cloning humans is in conflict with the right of the individuals to become single and unique. Moreover, copying procedure means the intentional transfer of the defect to the next generation (Arda, 2004). Dawson and Taylor (1997) mentioned that;

"...within the next decade people will need to consider the ethics of cloning humans and unless all students are taught about the process of biotechnology they are in danger of being woefully ignorant about the techology involved. They also argued that the lack of understanding and associated fear may contribute to an anti-science backlash where society rejects rather than confronts the ethical issues." (p.171)

Considering these issues, our future teachers' of science have responsibilities as citizens and as teachers to prepare the next generation of cizitens to be component in the consideration of cloning technologies and help their students discuss ethical implications of cloning technology even when these are controversial and contested. In accordince with these responsibilities, we need to learn preservice science teachers' perceptions of cloning technologies and it is important to find whether they are able to think ethical issues of cloning technology.

Aim of the Study

This study aims to evaluate preservice science teachers' opinions and ethical perceptions in relation to the application of cloning technologies. The study addresses the following research questions:

- 1. What are the opinions and knowledge of preservice science teachers' related to cloning studies?
- 2. What are the ethical perceptions of preservice science teachers' related to dilemmas about cloning studies?

METHOD

Study Group

This study is conducted during the spring semester of 2006-2007 academic year. The students who comprise the sample includes 112 preservice science teachers in a four year science

teacher preparation programme at one university in the Marmara region of Turkey. All of the preservice science teachers (58 girls and 54 boys) were in their fourth year of their study and they would be science teachers in the next year. The major fields of the participants were biology, chemistry, physics and general sciences. They also attended genetic course including definition, scope, importance of genetics and it s influence on our lives, provide information related to historical development of genetics and also raise awareness of genetices studies.

Instruments

The research instrument was designed to address the research questions. Making the issue more relevant two dilemmas were used to get preservice science teachers' perceptions about cloning studies. Of the two dilemmas, one was regarding human cloning used before in literature (http://gslc.genetics.utah.edu) and the other one was regarding animal cloning a science news obtained from a scientific journal popular in Turkey. Students were directed to read each dilemma and chose one of the three choices "yes", "no", "I can't decide" and then write a response what should do to resolve the situation. Two of the dilemmas were given in the appendix.

Open-ended and a multiple responses questions were also administrated to the students to understand their opinions related to potential risks, utility and control of these studies, to assess their knowledge about cloning technology, and also to understand their knowledge related to resources they learnt about cloning technology. The validity and reliability of open-ended questions provided by taking views of two researchers whose profession were biotechnology and by doing pilot. Since multiple question was used in previous studies a new study was not been done on reliability and validity of this question. However this question was also consulted to the biotechnology specialists.

All of the instruments were in Turkish. After open ended and multiple choice questions were performed dilemmas were applied to the students.

Data Analysis

Quantitative and qualitative analysis were used for the analysis of the results. Firstly, preservice science teachers were asked to define the term cloning. Data obtained from this open-ended question were analysed by considering a definition of cloning. According to this definition, cloning term has three significant parts which include oganisms or cells arising from a single individual, by asexual reproductive and therefore genetically identical (Mascazine et al., 1998). Considering these parts as indicators each students' definitions were analysed and determined if they had given true, partially true or false definitions. If students gave the one or two parts of these definition their definitions were accepted partially true, if they gave the three parts of this definition their definitions were accepted true and if their definitions were quite different from these parts, they were accepted false.

Secondly, two multiple choice questions were asked to the preservice science teachers to learn their conceptual knowledge about risks and benefits of cloning technologies and also resources they learnt about these technologies. For data obtained from these questions descriptive statistics and comparison analysis were used for quantitative data analysis. The results were analyzed using the SPSS 12.00 for Windows software.

Lastly, to learn preservice science teachers' bioethical perceptions about cloning technology two dilemmas were presented to the students. Data obtained from two dilemmas were analyzed

by using qualitative analysis methods. Preservice science teachers' responses were first seperated as "yes, no, I can't decide", then frequency of each response (yes, no, I can't decide) was counted and calculated. The written statements supporting each response were categorised and their frequencies calculated for each category. Preservice science teachers' responses were analyzed iteratively and they were read several times and categorised independently by two different researchers.

RESULTS

Table 1. Frequency of responses about definition of cloning

	D	Preservice sci	ience teachers
	Responses	f	%
Cloning	True	20	17.8
	Partially true	61	54.4
	False	26	23.2
	No responding	5	4.4
	Total	112	100

Table 1 provide preservice science teachers' definitions of cloning. The table shows that of the 112 students only 17.8% of them defined the cloning term as true while 54.4% of them defined as partially true. On the other hand, it was found that significant part of preservice science teachers' (23.2%) definitions were not found correct.

Table 2. Preservice science teachers' perceptions of risks and benefits associated with cloning studies

stadies		
Perceptions	f	%
Risks outweigh benefits	57	50.8
Benefits outweigh risks	16	14.2
Risks and benefits are equal	33	29.3
No responding	6	5.3
Total	112	100.0

Table 2 shows preservice science teachers' perceptions of risks and benefits associated with cloning studies in general. According to the table it was found that half of the preservice science teachers (50.8%) thought that risks outweighed benefits while 14.2 % of them thought that benefits outweighed risks. In addition 29.3% of the students thought that risks and benefits of these studies were equal.

Table 3. Resources preservice science teachers' learned about cloning technology

Resources	f
TV news	91
İnternet	88
Newspapers	87
Scientific journal	77
Courses	59
Documentaries	52
Social organisations	4

Table 3 shows that most of the students acquire their knowledge on cloning from formal and informal resources. While most of the students get their knowledge from TV news (91), the internet (88), newspapers (87) and scientific journals (77), some of them learn about these issues from their courses (59), documentaries (52), and few of them learn from social organisations. Since a students marks more than one option we did not percentages values were not used in this table.

Table 4. Frequency and percentages of students' responses associated with human cloning and animal cloning dilemmas

	_	Dilemmas				
Students	Responses	Human	Cloning	Animal	Cloning	
	_	F	%	f	%	
	Yes	25	23.8	71	66.9	
Preservice science teachers	Can't decide	23	21	8	7.5	
	No	58	55.1	17	16.0	
	No responses	-	-	10	9.5	
	Total	106	100	106	100	

From the table (4), it can be seen that, while most of the students (55.1%) gave "no" responses regarding with human coloning dilemma they (66.9%) gave "yes" responses regarding with animal cloning dilemma. Considering this results, it can be concluded that while most of the preservice sciece teachers' had negative perceptions about human cloning studies, they had positive perceptions about animal cloning studies.

Table 5. The reasons of students' responses related to human cloning dilemma

	Preservice science teachers			
Responses	No	Yes		
	f	f		
Related with cloning mechanism	15	4		
Related with nature	27	-		
Related with human characteristics	5	-		
Related with ethics	10	-		
Related with the character (mother)	10	28		
Related with clone	19	-		
Related with society	5	-		

In this table students' responses put in more than one category. That's why, frequency of responses were not equal with the sample. Results seen in this table (5) indicated the most frequently negative and positive reasons regarding the dilemma of human cloning. From this table it can be understood that negative reasons had more frequency compared to positive reasons. It was found that the most frequently mentioned negative reasons were related with nature, cloning mechanism, clone and ethics. Students' explanations regarding these reasons were given below.

One of the students explain her reasons related with nature as follows; If I look at this event emotionally, my answer was "yes", but if we objectively evaluate the world continues with a very nice cycle and in this ecological cycle someone gets, someone dies. If cloning gets commmon, population will inevitably increase and also this brings the end of the world. It will be meaningless putting billions of peoples at risk for one person.

Considering this answer we can say that this student evaluate the dilemma in terms of positive and negative sides, but her opinions regarding nature looks more important.

On the other hand, another student expressed his reasons related with clone in the following way:

..I don't know if he/she will be completely a person. Probably he/she will not be like a robot. He/she may have the same status as a physical entity, but he/she may not have the same brain or same attitudes with the other child.

It seems that this student think the physical and biological characteristics of a clone, but it can be understood from his responses that he is not sure about his knowledge or his knowledge is not enough to understand the characteristics of a clone.

In addition to these, one student expressed her reasons related with cloning mecanism in that way:

Clone's life durations is short, so they may not live for a long time and also applications of this technique may have bad results and this can also affect the individuals

This student can think one of the ethical result of cloning mechanism which can be associated with the lack of safe scientific measures of cloning.

In contrast to these negative reasons the most frequently mentioned positive reason was related with a character (mother) found in dilemma story. One of the preservice science teachers mentioned her feelings as follows:

...if you look at the aim of this story, you can think what kind of aim it include, is it good or bad?..For instance, this woman does not deal with weapon trade, she is a normal housewife, she also lost her husband, and she has no other chance to be a mother biologically...If she wants to have a chid from her husband- she also lost her chid which is another depression...I think it should be allowed...because she wants to have a target to connect the life.. She wants a rest from them.

Table 6. The reasons of students' responses related to animal cloning dilemma

Dognongog	Preservice science teachers			
Responses	No Yes			
Related with naturel process	16	75		
Related with cloning mechanism	3	-		
Related with ethics	-	1		

As can be seen from the table (6), positive reasons had the highest frequency. According to this table these reasons were relatated to naturel process which include ecological balance of the nature. Negative reasons were also determined regarding the nature, however the frequency of these reasons were found lower.

DISCUSSION

The results found in this study showed that most of the preservice science teachers were able to define cloning term partially true (54.4%) and few of them (17.8%) were able to give true definitions. Considering this result it can be thought that preservice science teachers had little

knowledge, for this reason they need to take courses including cloning studies to be aware of technological developments about cloning technologies. When we consider the results of resources they require their knowledge which showing that most of them learn these issues from informal resources, their limited knowledge was an expected result. Althought significant number of them used journals to learn about cloning technology, most of them were not able to give true definitions. Therefore it should be our responsibility make them conscious of reading useful journals to obtain accurate information.

Mascazine (1998) explored the knowledge of the general population regarding cloning. In this study researcher indicated that a significant number of individuals had not know how to define the term cloning, they (17.9%) had not given an accurate definition of cloning, over 38% were able to define cloning, 28% were able to give the complete definition of cloning and over 14% were able to give a complete definition of cloning including the important elements. In these studies individuals described their understanding with the rating of five choices. Most of them (%60.3) selected "little knowledge" as the most appropriate descriptor of their understanding however, they were lacking a basic understanding of the basic elements of cloning. In addition only 3.2% rated themselves as very knowledgeable about cloning and 3.8% rated themselves as having not knowledgeable (Mascazine et al., 1998). In contrast these results, another study indicated that students' ability to provide a generally accepted definition and examples of cloning were found relatively poor amongst 12-13 year olds, but improved in older students (Dawson, 2007). Nevertheless, some reserachers examined elementary education preservice teachers' understanding of biotechnology and its related processes and found that a moderate number of preservice teachers correctly defined cloning and also provided correct examples of cloning (Chabalengula et al., 2011). The differences among these studies results may be related to the quality of the instructions. In a study, researchers examined undergraduate non majors' conceptions of cloning before and after the instruction, including interactive lectures, case discussions, hands on activities, independent projects and they found that students' understanding of cloning increased (Concannon, et al. 2010).

Studies in literature showed that individuals were concerned about cloning. Balas and Hariharan (1998) revealed that people concerned about cloning and they indicated that more research needed to be done about cloning. In this study the question assessing the students' opinions of risks and benefits were intended to discover whether students found cloning studies risky or beneficial. From the results of this study it was found that students' perceptions of cloning were found negative. The results indicated that most of the preservice science teachers thought that risks outweighed benefits. Another study also revealed that teenagers were more likely perceive risks rather than benefits in relation to the cloning studies (Gunter et al., 1998).

The results of this study revealed that preservice science teachers' perceptions differentiated according the tpye of cloning study. They had negative perception when the study was dealing with human cloning, on the other hand, they had positive perceptions when the study was dealing with animal cloning. When it came to giving the reasons of each dilemma, students responded in various ways. It was found that most of the reasons associated with the human cloning dilemma were found negative and these reasons were related to the implementation of the cloning mechanism, naturel process and clone himself/herself. Besides, the term of ethics was also mentioned by some of the preservice science teachers and these students thought that the situation was not ethically right. However students who mentioned that cloninng studies were not ethically right could not explain their expression in detail. By considering this point it can be thought that most of the preservice science teachers were thought the ethical issues of cloning study, on the other hand their explanations were not enough to explain human cloning issue in an ethical way. In addition it was found that few students tended to resolve dilemmas

and justify their reasons by considering some of the bioethical principles. They seemed to give undue emphasis to the principles of beneficence and non-maleficence solving both of the dilemmas. However it seems that they could not give emphasis to principles of the respect of autonomy and justice.

In this study some of the preservice science teachers gave positive decisions regarding human cloning dilemma and they showed the reasons related with the character found in dilemma story. According to their reasons this person should not have been upset. With this reason it is thought that preservice science teachers could not give decisions considering the future of the situations, instead their emotionally considerations were significantly influence their decision makings. Similar results also found in a study which was related to explore preservice science teachers' informal reasoning regarding socioscientific issues. In this study, researchers identified that patterns of informal reasoning emerged as rationalistic, emotive, and intuitive reasoning and students' informal reasoning were influenced from their personal experiences, social considerations, moral-ethical considerations and technological concern (Topcu, et al., 2011).

Gunter et al (1998) asked all the individuals to rate the relative benefits and risks associated with cloning of animals. They found that all age groups of individuals saw more risks than benefits regarding animal cloning. In this study, in contrast to the human cloning most of the reasons associated with animal cloning were found positive. It can be understood that students' thought about the risks of human cloning outweighed than animal cloning. However the reasons giving by them were found quite same with the reasons regarding human cloning dilemma. It was found that many of these reasons were related to the natural process which include protecting ecological balance of the nature by cloning extinction of the species and it was also found that almost all of the preservice science teachers were agree with this reason. Balas and Hariharan (1998) found in their study that most of the peoples' responses to the benefits of cloning centered around the possible medical applications or food production of this technology. It can be concluded from these results that individuals' thoughts regarding benefits of cloning technology can be related with nature, medical applications or food production, which means that they can consider the utility of this technology for nature and human beings as well.

In conclusion, it is important to make individuals aware of the practical applications of current developments in bioethical implications and also to make them become well informed decision makers on these issues, especially about cloning studies, considering the important attributes of scientific liretacy and bioethical principles. Therefore it is suggested that these students need to be supported with biology courses including cloning studies and also to make them learn the principles of ethics, bioethics courses or biology courses including ethics issues should be added to their programmes.

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APPENDIX

Human cloning

allowed?

By many accounts, Mr and Mrs M were the happiest married couple in history. Their happiness was only compounded by the birth of their son.

Sadly, the this happiness ended tragically while on holiday. A terrible boating accident claimed the lives of both Mr M and his son. Mrs M survived, but was absolutely devastated by the loss of her precious son and loving husband.

Stricken with grief and unable to move on, Mrs M knew she would never feel "normal" again without a child to raise and love. Mrs M could not bear the thought of having a child that was not her husband, however. A local biotech company had been advertising breakthrough advances in cloning technology that enabled them to clone organisms from very small samples of DNA. According to the company, a small sample of bodily fluid, tissue, or hair from an organism yielded enough DNA to successfully produce a clone. This gave Mrs M a wonderful idea. She rummaged through the house until she found her son's hair brush. Trapped in the bristles was enough of her son's hair to produce a clone. Mrs M contacted the biotech company immediately and was informed about an important process they must go through before they can begin. In an effort to regulate human cloning, the federal government has set up a new Human Cloning Ethics Committee to oversee all cloning practices. The Human Cloning Ethics Committee consists of a research scientist, a doctor, the president of a biotech company, a psychologist, a member of the clergy, and a member of the community. Biotech companies must receive approval from the Committee before they begin any cloning projects. Mrs M's request is the first of this type the Committee has considered. Is this a case where human cloning should be

Animal cloning

In the United States genetically cloned wild African cats were kitten. Following one male and two female mating of wild cats, all of them were cloned, 8 puppies was born. Thus, it was found that copy animals have the ability to produce. With this development, researchers agreed that this development can provide population proliferation of the risk of extinction animal species. Is this a case where animal cloning should be allowed?



TEACHER CANDIDATES' POINT OF VIEWS ABOUT PORTFOLIO PREPARATION (TURKEY SETTING)

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ABSTRACT

This study aims at identifying teacher candidates' perspectives about the process of portfolio (the file of product) preparation. The quantitative data of this study was based on 110 first-year students at the primary school teacher education department (teacher candidates) and the qualitative data was composed of 15 teacher candidates' semi-structured interviews. As data collection tools, "The Inventory of Portfolio Preparation (PPI)" and semi-structured interview forms were used. The data was analysed through descriptive statistics and content analysis. The results of the study indicated that PPI develops teacher candidates' research and thinking skills and it is an important assessment technique. In addition; teacher candidates mentioned that time is one of their essential problems in the process of portfolio preparation and in order for a productive practice of this process, guidance should be given more effectively.

Keywords: Mathematics teaching, Portfolio, Alternative testing and evaluation techniques.

INTRODUCTION

In recent years, as a result of changes in epistemological theories, behaviourism has been replaced by constructivist approach. In line with this, the standards of "teaching" and "evaluation" have been revised and the objectives of learning have been re-defined (NCTM, 1995; Stiggins, 1999). The roles of students and teachers have been changed and from the testing and evaluation perspective, not only learning, itself, but also learning processes have been assessed (Webb, 1992; Eisner, 1999; Shepard, 2000; Stiggins, 2002; Mcmillan, 2004). Therefore; alternative testing and evaluation techniques which highlight students' individual abilities, manual skills and high-level thinking skills have emerged as well as traditional assessment methods (Stiggins, 1999; Sheffield & Cruikshank, 2000; Krulick, Rudnick & Milou, 2003; Dominguez Carmino, 2004).

Alternative testing and evaluation includes all assessment excluding the concept of traditional testing (Atkin, Black & Coffey, 2001; Bryant, 2001; Atılgan, 2006; Bahar, Nartgün, Durmuş & Bıçak, 2006). Alternative evaluation enables students to acquire the skills which are necessary to overcome difficulties or problems in daily or business lives. (Green & Emerson, 2008; Weigold, 1999). Giving emphasis on process as well as product, alternative testing and evaluation approaches highlight learners' high-level thoughts, problem solving skills and creativity. In addition, they motivate students to take the responsibility of their own learning and to feel proud of their acquisition. Wiggins (1989) also claims that the alternative assessment methods are realistic, judicative and innovative.

Since the reform in elementary school programmes in 2005 in Turkey, alternative testing and evaluation techniques have been used. One of these techniques is portfolio, which is one of the

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most extensively used ones. In fact, portfolio had been used in arts, photography and architecture, the professional fields in which best products were presented. Its use in education; however, dates back to 1990 (Payne, 1994; Wortham, 2005). Portfolio draws a picture of a learner's skills and this helps to decide on his future education life (Kulm, 1994).

In general, portfolio is a compilation of a learner's works in a specific period, revealing his skills. Also, these files show students' development, achievements and special interest. In short, a portfolio is composed of students' works, experiences and self-evaluation, which are based on different data resources and can be analysable and assessable. At the heart of portfolio, there is a systematic evaluation of students' works indicating their capacity (Moya and O'Malley, 1994).

Moreover; it is an essential evaluation tool giving descriptive, formative and summative information about students and their products. It also gives information about students' strengths and weaknesses in line with the organization of the education. Before the start of portfolio practice, the most important step is to identify the aim and the use of portfolio. At that step, it is important to plan the objectives of portfolio practice and what to put into the portfolio (Kulm, 1994).

A revision in the related literature shows various studies about portfolio. Some of these studies are based on theoretical knowledge (Saracaloğlu, Akamca & Yeşildere, 2006; Bekiroğlu, 2008; Ocak, 2006; Zou, 2002; Payne, 1994, Kulm, 1994), some on primary education level (Bedir, Polat & Sakacı, 2009; Birgin, 2008; Baki & Birgin 2004; Kabaş, 2007; Ocak, 2006; Özbaykuş, 2008), some on secondary education (English & Keshavarz, 2002; Erdoğan, 2006; Güngör, 2005; Maxwell & Lassak, 2008), some on university level (Bahçeci, 2006; Ersoy, 2006; Deveci, Ersoy and Ersoy, 2006; Morgil, Cingör, Erökten, Yavuz and Oskay, 2004; Parlakyıldız, 2008; Taşdemir, Taşdemir & Yıldırım, 2009) and the target audience in some of these studies are teachers (Kazu & Yorulmaz, 2007; Oğuz, 2008; Sırkıntı, 2007). Also, there are studies about electronic developmental portfolios (Achrazoglou, 2003; Funk, 2005; Korkmaz & Kaptan, 2005; Sivakumaran, 2005). Though this is the case, the use of portfolio in mathematics course has only been studied with primary school students in the related literature (Özbaykuş 2008).

As a result, this study investigates primary school teacher education department students' opinions about the process of portfolio preparation in terms of mathematics course. The study is thought to be beneficial for teacher candidates who will probably use portfolio in their teaching career. In line with these objectives, this study addresses the following research questions:

- 1) To what extent does the teacher candidates' portfolio preparation process influence their personal development?
- 2) Does the teacher candidates' portfolio preparation process lead to a significant difference in terms of gender and academic achievement?
- 3) To what extent does the teacher candidates' portfolio preparation process influence their professional development?
- 4) What are the teacher candidates' problems during the portfolio preparation process and how can these problems be solved?

METHOD

Aiming to investigate teacher candidates' point of views about portfolio preparation process, this study is based on both qualitative and quantitative methods. The reason of using two methods is to increase the advantages and to decrease the disadvantages of qualitative an quantitative methods (Johnson & Onwuegbuzie, 2004; Punch, 2005).

Subjects

The participants of this study are 110 (70 females, 40 males) first year students at Cukurova University, Education Faculty, Primary School Education Department. They are teacher candidates who take Basic Mathematics II course and who take part in the process of portfolio preparation. As the aim is to be able to reach all teacher candidates who are involved in portfolio preparation process, no sampling method is preferred. 63.1 % of the participants are females; whereas, 36.9 % of them are males. The mean of the participants' mathematics achievement is 34.3% "low", 54.9 % "mid" and 10.8 % "high".

Data Collection and Analysis

Two data collection tools are used in the study: a) The Inventory of Portfolio Preparation (PPI) developed by the researcher, herself b) semi-structured interview forms. No measurement tool is used for the teacher candidates' academic achievement in the mathematics course. Their actual scores taken in their course are considered. According to this, three groups have emerged: a) when the mean score at the end of the term in the mathematics course is 1.99 and below 1.99, this is categorized as "low", b) when the mean score at the end of the term in the mathematics course is between 2.00 and 2.99, it is grouped as "mid", c) when the mean score at the end of the term in the mathematics course is 3.00 or higher than 3.00, it is classified as "high".

During the preparation of PPI, related literature has been considered and thirty two positive and eight negative items have been prepared. These items have been analysed by six instructors specialized in curriculum development and mathematics teaching at Cukurova University, Education Faculty, Educational Sciences and Primary School Education Department. Following this revision, required changes have been made and then thirty one items have been chosen.

The pilot version of PPI was administered to four teacher candidates in face to face sessions. These participants had already experienced portfolio and they were excluded from the actual sampling of the study. During the administration, each item was read to each participant and their responses were marked on the inventory, so it was tested whether the statements were clear enough to understand or not. Then, the items were controlled again and PPI was finalized. For the responses, the participants were expected to give an answer through a five-point rating scale (completely agree-disagree). The participants were also asked personal information such as their gender and achievement score.

The data based on 110 first year students were transferred to the computer and structural validity of items were tested through factor analysis. The positive items in the inventory were scored from one to five and negative items were scored from five to one. Then, main components analysis was done in order to reveal factor analysis of the inventory.

Several levels of analysis were respectively conducted on the items taken in the portfolio preparation process: skewness and sharpness coefficient, item-total item correlations, correlation matrix values of items, factor loads (the least .30) and differences among factor loads of items loaded not onto more than one factor. As a result of this analysis, items numbered as 1, 2, 3, 5, 7, 8, 10, 12, 16, 17, 18, 19, 21, 24, 25, 27, 28, 29, 30, 31 were taken out of the inventory. 11 items on which main components analysis were conducted were gathered in three factors of which absolute values were higher than 1.00. According to main components analysis, the absolute value of the first factor was 3.480, the variance value that it explained was 31.64 %. The absolute value of the second factor was 2.06 and the variance value that it explained was 18.71 %. The absolute value of the third factor was 1.34 and the variance value that it explained was 12.213 %. The higher variance rates obtained at the end of the factor analysis was, the stronger the factor structure of the inventory was. The total variance that was explained by these three factors 62.57 %. In social sciences, variance rates ranging from 40 % to 60 % were regarded as satisfactory (Tavṣancıl, 2010).

As a result of the analysis, it was seen that all items measuring teacher candidates' skill development level met all required conditions (factor loads higher than .30 and the difference between loads accumulated below two factors higher than .18). These items were, shortly, related to the development of the skills about communication, reasoning and decision taking. That's why; this sub-scale has been called "Thinking Skill". The item-total item correlation of the five items in this sub-scale changed from .73 to .81. Also, Cronbach Alpha inner consistency coefficient was found as .80. When the value is higher than .70, it means that the inventory is reliable.

Items numbered as 20, 22 and 23 were named as "The Effect of the Process on the Individual" which were about long-term learning and difficulties of portfolio preparation process. The item-total correlation value of these items in this sub-scale was between .80 and .86. Also, Cronbach Alpha inner consistency coefficient was found as .84.

The items numbered as 4, 6 and 9 were categorized as "Research Skill" which were about taking decision comfortably on the subject being searched, the access to the sources and the development of this skill during portfolio preparation process. The item-total correlation of this sub-scale was between .68 and .75. In addition to this, Cronbach Alpha inner consistency coefficient was found as .78.

Table 1 illustrates factor loads, item-total score correlation (r), absolute values and rate of explaining variance, item numbers, ranges and Cronbach Alpha values of items related to portfolio preparation process, based on the factor and reliability analysis.

According to the analysis conducted to evaluate whether the items were distinctive or not as shown in Table 1, item total correlation coefficient ranged from .68 to .86. The means of 11 items in the "Thinking Skill", "The Effect of the Process on the Individual" and "Research Skill" sub-scales were 3.27-4.51 and their standard deviations were 0.55-1.15. Moreover, total scores that individuals took from the data accumulated were ranked from the highest to the lowest. Following this ranking, low 27 % and high 27 % groups were identified and it was analysed that whether items could differentiate these two groups. It was seen that all items differentiated the groups significantly (p<0.01). For this solution reached at four iterations, KMO coefficient sampling efficiency value was found as .74.

Table 1. Factor loads of Items, Corrected Item-Total Score Correlation of Items (r), Absolute Value of Items (r), Rate of Explaining Variance of Items, Number of Items and Cronbach Alpha Values of Items related to Portfolio Preparation Process

Tames of Items		The Effect of the Process	Research	r*
Item no	Thinking Skill	on the Individual	Skill	
15	.81			.76
13	.78			.81
14	.78			.78
11	.77			.73
26	.64		.46	.77
22		.88		.86
20		.81		.80
23		.80		.80
4			.77	.72
9	.36		.66	.75
6			.65	.68
Absolute Value	3.48	1.64	1.34	Total
Variance Explained	31.64	18.71	12.21	%62.57
Cronbach Alpha	.80	.84	.78	.72
Range	.6481	.8088	.6577	.6488
Number of Items	5	3	3	11

Note: Factor loads lower that .20 were not reported in order to make the table easy to follow. r*: Item-total item correlation; *p<0.01

For the qualitative data of the study, 15 teacher candidates were interviewed through semistructured interviews. While preparing the interview forms, related literature was reviewed and specialists' points of views were taken. After these interactions, the form was analysed by six instructors who were specialized in curriculum development and mathematics teaching at Çukurova University, Education Faculty, Educational Sciences and Primary School Education Department. Then, the form was finalized. In order to see whether the questions were comprehensible and applicable enough, two teacher candidates volunteered to take part in the pilot administration of the inventory. As a result of this, no problems were seen about the inventory.

Semi-structured interview forms included some information about: teacher candidates' perspectives about portfolio preparation process, the effect of portfolio preparation process on their professional development, their problems about this process and probable solutions for these problems. In addition to the questions in the interview forms, some further questions were asked at the end of interviews. Interviews lasting 8-12 minutes were audio-recorded. Some required information about the date, setting and time of the interviews were also recorded. The participants interviewed were coded as S1, S2 etc.

For the analysis of the quantitative data, descriptive statistics, explanatory factor analysis, independent samples t-test and one-way ANOVA were used. Content analysis was used for qualitative data. At this step, it was required to conceptualize the data, and then to organize and to identify related codes and themes. While coding, the data was read line by line and related themes were identified. The coded data were grouped according to differences and similarities. Next, related codes were gathered and themes emerged (Yıldırım & Şimşek, 2005). During the content analysis, an instructor specialised in programme development coded two teacher candidates' interview forms as a second coder. The agreement rate between two coders was

.87. Also, the researcher, herself, reanalysed her consistency on the data coding done at two different times. She coded two teacher candidates' interview forms in fortnight-intervals and tested her consistency. Her coding reliability coefficient was .92.

FINDINGS

In this part, teacher candidates' points of views about portfolio preparation process are given.

The effect of portfolio preparation process on teacher candidates' personal development

Teacher candidates' points of views about portfolio preparation process were investigated by doing factor analysis. Accordingly, the data were gathered under the sub-scales of "Thinking Skill", "The Effect of the Process on the Individual" and "Research Skill". The mean and the standard deviation values of these sub-scales are presented in Table 2.

Table 2. The Effect Of Portfolio Preparation Process On The Personal Development Of The Teacher Candidates And The Mean And The Standard Deviation Values Of This Effect

Sub-scales	N	\overline{X}	\mathbf{S}
Thinking Scale	108	4.37	.49
The Effect of the Process on the Individual	106	4.11	.60
Research Skill	106	3.33	.93

In Table 2, it is seen that the mean of the sub-scale of "Thinking Skill" is 4.37 and the teacher candidates' point of views are at the level of "I completely agree". Besides, the mean of the sub-scale of "The Effect of the Process on the Individual" is 4.11 and the teacher candidates agreed on this sub-scale. However, it is seen that the teacher candidates hesitated for the sub-scale of "Research Skill" as the mean of this sub-scale is 3.33.

The teacher candidates were asked for their point of views about the portfolio preparation process in mathematics course during the interviews. The theme, code and frequency distribution of the responses given to this question are presented in Table 3.

Table 3. Teacher Candidates' Point of Views about Portfolio Preparation Process in Terms of Themes, Codes and Frequency

Theme	Codes	f
	Creative Thinking Skill	11
Skill	Research Skill	4
	Skill of Relating	1
	Liking	3
Affective	Wondering	2
	Responsibility Feeling	1
Cognitive	Cognitive Development	5

As it is seen in Table 3, the teacher candidates' points of views were discussed in three main themes, skill, affective and cognitive. The majority of the teacher candidates expressed that their skills improved in the first theme and their affective characteristics had improved in the second theme. In the last theme, one third of the teacher candidates expressed that their cognitive development had improved.

About two third of the teacher candidates (11 teacher candidates) who were interviewed about the theme of skill stated that the studies in the portfolio preparation process improved their thinking skills. The point of view of a teacher candidate was as follows: "I had perceived geometry only as answering questions and drawing some figures. I had never prepared a portfolio like this. We did some creative studies and the figures that we drew improved our creativity. In the end, we learnt the pi number which we hadn't known before and where the area of the circle came from." (S7). In parallelism with this, about one fourth of the teacher candidates (4 teacher candidates) expressed that they improved their research skill. In the scope of the same theme, one teacher candidate stated as follows that he improved his associating skills by associating the mathematics with daily life. "At first, I couldn't understand what was happening, but as time passed, I noticed that it was useful. In the past, I had considered mathematics as unidimensional and a thing that was abstract from life. However, I noticed when I saw in our studies that we could use the figures and the mathematical expressions in our lives. I realized that I could use the things which I had learnt in my student life in my daily life. I believe that I prepared a very nice portfolio by making a great effort in my student life of 19 years. In other words, I had it as a result of my own effort. "(S2).

In the affective dimension as the second theme, three of the teacher candidates emphasized that they liked the portfolio preparation process, two of them told that they found the process as intriguing and one of them expressed that his sense of responsibility improved. In this context, the teacher coded as S1 mentioned his point of view as follows; "Portfolio is a work which requires educational research, this kind of works are not difficult, they are intriguing and you can do them without getting bored, we can describe what we want to tell by figures, … it was important as it was the first, it improved the sense of responsibility."

In the cognitive process as the last theme, five of the teacher candidates expressed that they comprehended the subject better and they emphasized this with the following sample words; "we could see the relationships between the figures better while we were drawing them, we found the formulas by ourselves, we noticed the connections between hexagon and triangle and I thought it is more permanent." (S3).

Findings Related to Portfolio Preparation Process In Terms of Gender

Independent samples t-test was carried out so as to determine if there was a significant difference between the gender and the scores that the teacher candidates got from the subscales of "Thinking skill", "The Effect of the Process on the Individual" and "Research skill". The results of the analysis were presented in Table 4.

Table 4. Independent Samples t–Test Results Related to Portfolio Preparation Process In Terms of Gender

Sub-scales	Gender	N	\overline{X}	S	sd	t
Thinking Chill	Female	68	4.36	.47	106	422
Thinking Skill	Male	40	4.40	.52	100	422
The Effect of the Process on the	Female	67	4.17	.55	104	1.454
Individual	Male	39	4.00	.66	104	1.434
Research Skill	Female	67	3.42	.95	104	1.326
Research Skiii	Male	39	3.17	.87	104	1.320

When Table 4 is analyzed, it is seen that there is no significant difference between the variable of gender and the scores of the sub-scales of "Thinking skill", "The Effect of the

Process on the Individual" and "*Research skill*" (respectively; $t_{[106]=-.422}$, p>.05; $t_{[104]=1.454}$, p>.05; $t_{[104]=-1.326}$, p>.05]. This shows that male and female teacher candidates agreed on the items related with portfolio preparation process at similar rates.

Findings Related to Portfolio Preparation Process in Terms of Academic Achievement

One-way analysis of variance was implemented in order to determine if there was a significant difference between the academic achievement and the scores that the teacher candidates got from the sub-scales of "Thinking skill", "The Effect of the Process on the Individual" and "Research skill" and the results were presented in Table 5.

Table 5. The Mean, Standard Deviation and F Values Related to Portfolio Preparation Process In Terms of Academic Achievement (sd: 2)

Sub-scales	Academic Achievement	N	\overline{X}	S	F	Significant Difference (LSD)
	Low	34	4.42	.48		
Thinking Skill	Mid	54	4.39	.49	.075	
	High	11	4.39	.40		
The Effect of the	Low	35	4.07	.64		
Process on the	Mid	53	4.17	.55	.3.48	
Individual	High	10	4.17	.55		
	Low	35	3.39	.89		
Research Skill	Mid	52	3.13	.97	3.353*	High >Mid
	High	10	4.00	.68		

^{*} p<0.05

When Table 5 is taken into account, it is seen that there is a statistically significant difference between the academic achievement level and the sub-scale of "Research Skill" ($F_{[2]=3.353}$, p<.05). When the results of LSD test which was carried out to determine the direction of the difference was taken into account, it was seen that the significant difference in the sub-scale of "Research Skill" was between the teacher candidates with high academic achievement and the teacher candidates with mid academic achievement and it was in favor of the teacher candidates with high academic achievement. It is seen in Table 5 that the scores that were got from the sub-scales of Thinking Skill and The Effect of the Process on the Individual in terms of academic achievement were close to each other.

The teacher candidates were asked for the effect of the portfolio preparation process on their personal development in the mathematics course during the interviews. The theme, code and frequency distributions of the responses given to this question were presented in Table 6.

Table 6. Themes, Codes and Frequency Distribution Related to Portfolio Preparation Process in Terms of the Effect on Professional Development

Theme	Codes	f
Effect of Professional Development	Applicability	15
	Evaluation Tool	4

When Table 6 is considered, it is seen that all of the teacher candidates (15) stated that they could implement the portfolio preparation process in their professional lives and four of them told that they could use it even in other courses. Besides, four of the teacher candidates

emphasized that it was an important assessment tool. In this context, the point of views of the teachers coded as S11 and S13 were as follows respectively; "these kinds of activities have very important contributions to our teaching career. I think they improve us in terms of our professions. This way, it helped us to gain experience in terms of personal developments of both the teachers and the students. Better adaptation can be obtained. The portfolio preparation process provides opportunity to carry out the lesson not with examples of stereotypes but with a different perspective. It makes especially the abstract topics of geometry more concrete and this way the students' performances go up and they become more successful... (S11)". "I learnt what kind of situations with which the students will face in the future in advance and I will guide my students by considering them. I learnt the situations which my students will have difficulty in dealing with and what kind of problems with which my students will have by experiencing (S13)".

In the interviews with the teacher candidates, the problems that they reported about the portfolio preparation process show diversity. These problems were handled under four themes as shown in Table 7.

 Table 7. Themes, Codes and Frequency Distribution in Terms of Problems During the Process

of Portfolio Preparation

Themes	Codes	f
Experience	Following for the first time	9
	Requirement of regular working	3
Time	Time-consuming	11
Instruction	Not using the instructions	5
Self-evaluation forms	Difficulties in expressing point of views	5

As seen in Table 7, the teacher candidates had problems in "experience" theme the most during the portfolio preparation process. In addition, the teacher candidates told that they also had problems respectively in the themes of "time", "instruction" and "self-evaluation forms". Moreover, one teacher candidate mentioned that he did not have any problems.

The teacher candidates had problems in the theme of "experience" the most in the portfolio preparation process. Nine of the teacher candidates expressed the reason for having a problem as they followed it for the first time and three of them told that they had problems because the process required regular studying. In this regard, the teacher candidate coded as \$10 expressed his points of view as follows; "At first, we had difficulty as we didn't know how to implement it and we didn't have any previous knowledge about it. We got used to it when we approached to the end. I couldn't manage the time efficiently. I couldn't prepare my portfolio regularly and day to day...". 11 of the teacher candidates stated that they found the process as time-consuming. The viewpoint of a teacher who found the process as time-consuming is as follows; "I tried to use my own handcraft in addition to the studies done in the classroom. I searched the internet... it was very difficult and took too much time. I had difficulty in allowing some time to it when the other courses join" (\$9).

In the context of the theme of "instruction", five of the teacher candidates which were interviewed emphasized that they couldn't implement the process completely. In the same context, five teacher candidates mentioned that they had difficulties in filling in the self-evaluation forms. The viewpoint of the teacher candidate coded as S14 is as follows; "...I had difficulty in filling in the self-evaluation forms at the end of the activities. I had trouble

especially in reflecting the viewpoints objectively to the other side and using the language fluently".

The solution offers of the teacher candidates about the problems they had during the portfolio preparation process were handled under four themes as shown in Table 8.

Table 8. Themes, Codes and Frequency Distribution of Solutions to the Problems Experienced in the Portfolio Preparation Process

Themes	Codes	f
Time	It requires more time	4
Guidance	It requires regular feedback	3
Self-evaluation	Self-evaluation forms should be decreased	2
Number of Activities	The number of activities should be increased	1

As seen en in Table 8, four themes have emerged about the problems that teacher candidates have experienced during the portfolio preparation process. It can be seen that teacher candidates have the most suggestions about timing and guidance. Also, they have recommendations self-evaluation and the number of activities.

Nearly a quarter percent of teacher candidates have said that time is not enough and they need more time. For example; the teacher candidate coded as S3 mentioned "I wish I had had more time. A file can be prepared during the summer holiday. I wish I could have concentrated more on each subject".

Moreover; three of the teacher candidates said that giving continuous feedback about the works they have already done would be useful and two of them mentioned that self-evaluation forms should be decreased and one said that the number of activities in the portfolio should be increased. As an example; the teacher candidate coded as S8 said: "Self-evaluation forms should not be given at the end of activities. Instead, a general self-evaluation form will be enough...The number of activities requiring manual skills should be increased..."

DISCUSSION AND RESULTS

This study investigates primary school education department students; namely, teacher candidates' point of views regarding portfolio preparation process. The results have revealed that teacher candidates have shown development in the dimension of skills, especially thinking, gaining research skills, affective and cognitive processes.

In line with this, as a result of the factor analysis based on PPI, the teacher candidates' opinions have accumulated at the sub-factor called as "thinking skills". This factor is also in line with qualitative data of the study. From this perspective, the findings of this study have supported the studies by Bahçeci & Kuru (2008), Darling (2001); Ersoy (2006); Kazu & Yorulmaz (2007); Maxwell & Lassak (2008); Morgil, Cingör, Erökten, Yavuz & Oskay (2004); Özbaykuş (2008), Parlakyıldız (2008) and Stecher & Hamilton (1994). For example; in a study by Stecher and Hamilton (1994) with 4th and 8th year mathematics classes in primary school, it was found that portfolios increased students' high thinking skills and affected their problem solving and communication skills positively. Also, the related literature includes a lot of studies about revealing students' thinking and research skills such as problem solving, reasoning, communication and deducing skills in mathematics teaching (Cathcart, Pothier, Vance & Bezuk, 2006; Heddens & Speer, 2006; Krulick, Rudnick & Milou, 2003).

The findings based on the interviews are considered in collaboration with PPI, it was clearly seen that teacher candidates' research skills and relation skills into the daily life developed. These results are parallel to studies by Bahçeci & Kuru (2008), Cooney, Sanchez & Ice (2001), Kulm (1993), Long (2001), Myers (2008), Özbaykuş (2008), Pandey & Smith (1991), Santos (2007) and Wiggins (1989). Bahçeci and Kuru conducted their experimental study with 215 university students from different departments in four experimental and four control groups. In their study, they found that students participating in portfolio preparation process developed their personal and life-related skills such as research, problem solving, decision taking and critical thinking skills. Similarly; Özbaykuş found that portfolio practice in mathematics course and in a unit called as "reflections from numbers to probability" improved students' research skills.

Regarding the sub-scale "the effect of the process on the individual", the participants thought that portfolio preparation process was "tiring", "difficult" and "stressful". This finding is similar to studies by Bahçeci (2006) and Darling (2001). In a study by Bahçeci, it was seen that students in portfolio group could not make use of the process effectively and had stress and timing problems. However; Özbaykuş (2008) and Slater, Ryan and Samson (1997) found in their studies that students taking part in portfolio preparation process were less stressful and anxious and they used their time more productively.

On the other hand, the teacher candidates liked portfolio preparation process and found it challenging and positive, which supports Bahçeci (2006), Bedir et al., Benson & Smith (1998), Birgin (2008), Kabaş (2007), Korkmaz & Kaptan (2002), Özbaykuş (2008), Parlakyıldız (2008), Sırkıntı (2007) and Stecher' (1998) results. To exemplify; in a study titled as "Benefits and Difficulties of Large-Scale Portfolio Evaluation" by Stecher, it was revealed that portfolio evaluation is beneficial to teaching and teachers are willing in portfolio preparation process. In addition, it was seen that students' expectations have increased and teaching process and the objectives of the programme have changed accordingly. Similar to this, Sırkıntı carried out a study and focused on primary school and mathematics teachers' point of views about portfolio preparation in mathematics course. He found that portfolio preparation process makes students active and gives them a chance to show their skills and motivates them.

Though this is the case, a contradiction is seen between the quantitative dimension "the effect of the process on the individual" and qualitative dimension "affective theme". In other words; while teacher candidates said that portfolio preparation process was tiring, difficult and stressful, in the interviews they mentioned that they liked portfolio preparation process and found it motivating and challenging. This may have derived from the fact that teacher candidates are inexperienced in portfolio preparation process and could not use their time effectively.

Moreover; the teacher candidates explained that their main problem was due to their lack of experience in portfolio preparation process. This result is also supported by a lot of researchers such as Aschbacher (1995), Baki & Birgin (2002); Darling (2001), Deveci et al. (2006) and Erdoğan (2006). Deveci et al. carried out a study with teacher candidates about portfolio use in Science and Social Sciences Teaching courses through a qualitative study. They found that teacher candidates were in panic as it was their first encounter to portfolio.

The next finding of this study is that portfolio preparation process is time taking. This is also in line with Aschbacher (1995), Baki & Birgin (2002), Benson & Smith (1998), Erdoğan (2006), Ersoy (2006), Kazu & Yorulmaz (2007), Laverie (2002), McMillian (2004), Ocak (2006), Özbaykuş (2008), Parlakyıldız (2008), Santos (2007), Stecher (1998), and Sırkıntı (2007). In a

study by Baki and Birgin, they observed that the teacher had a trouble in scoring her students' works and in filling her observation forms in portfolio use in mathematics course as the class was overcrowded. In the same manner, in Ocak's study about students' point of views based on portfolio, it was seen that students had timing problems in preparing their portfolios because of formal exams such as Science School Examination. In addition; McMillian found that teachers had to spend much time in developing and evaluating criteria according to works in the portfolio. In contrast; Birgin (2008) found that most of the 7th year students (80.8%) did not find portfolio preparation as a time taking activity.

Also, the teacher candidates mentioned that they could use portfolio in their future professional lives. This result is in line with Bahçeci & Kuru (2008), Ersoy (2006), Kabaş (2007), Ocak (2006) and Oğuz's (2008) findings. They found out that teacher candidates could make use of portfolio as an alternative evaluation tool in their profession.

A further finding of this study is no significant difference between teacher candidates' gender and portfolio preparation process. It can be said that female and male teacher candidates' point of views are similar to each other about this issue. This finding also supports Ersoy's results (2006). He also claimed that teacher candidates from primary school education department, mathematics teaching department and pre-school education department did not show any differences about their perspectives related to portfolio in terms of gender. However; Oğuz (2008) found a significant difference in favor of female teacher candidates about portfolio preparation process.

In the, a significant difference is seen between teacher candidates' academic achievement and "research skill" (p<.05). In line with this, there is a significant difference between the teacher candidates who are academically successful and those who are at the mid-level, which is in favor of successful teacher candidates. Therefore; we can say that teacher candidates' research skills increase as they become more successful academically. This finding supports the results by English & Keshavarz (2002), Bedir et al. (2009), Güngör (2005), Parlakyıldız (2008) and Taşdemir, Taşdemir & Yıldırım (2009). Güngör found that experimental group participants who prepared their portfolio on the basis of constructivist approach were more successful than control group students who used traditional method. There are; however, contradictory results in the related literature (Erdoğan (2006), Ersoy (2006), Bahçeci (2006), Slater, Ryan & Samson (1997). In Erdoğan's study; no statistically significant difference was seen between the academic achievement of experimental group participants who prepared portfolio along with traditional teaching and control group teacher candidates who followed traditional method.

As well as these findings above, teacher candidates suggested being given feedback and information about portfolios which were prepared. This result is in line with Kazu & Yorulmaz (2007), Laverie (2002), Maxwell & Lassak (2008), Santos (2007) and Segers, Gijbels & Thurlings (2008). Kazu and Yorulmaz recommended hat both students and teachers should be given information about portfolio.

To summarize; aiming to identify teacher candidates' point of views about portfolio preparation process by means of qualitative and quantitative data, this study shows that teacher candidates have developed their thinking skills, have gained research skills and improved themselves in the cognitive and affective process. In addition to this, no significant difference has been found between portfolio preparation process and gender but it has been found out that students who are academically more successful are more effective in using their research skills. Next; it has been seen that teacher candidates have had some problems about timing and experience. Therefore; it can be said that they should be given more time and continuous

guidance. Based on these results, we can say that there are positive effects of portfolio preparation in different fields and portfolio can be used as an important alternative evaluation tool in teacher candidates' future academic lives.

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SCHILLERS REZEPTION IN DER TÜRKEI*

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ABSTRACT

The focal point of this study has been to scrutinize the perception of Freiedrich von Schiller's works Räuber, Kabale und Liebe and Wilhelm Tell. Friedrich von Schiller's "Räuber" was the first German drama that was both translated in Turkish and put on stage in Otoman Theatre. The work was performed under discrete names in several years during the Administrative Reforms Period. The reason that the play was performed under discrete names seems as if it had been censored. The reason why it was censored may be explicated via the fact that it had links with banditry, which was not in congruous with the theatre and play conception in that period. What makes Friedrich von Schiller popular in Turkey is Giyom Tell that conveys it on a discrete plane. Wilhelm Tell or Giyom Tell so called in Turkey was perceived as an symbol of independence and freedom and found place in coursebooks. The hero of his work "Räuber" was the antagonist whereas Willem Tell was seen as the protagonist and perceived so. As for Kabale und Liebe, it was adopted as a melodrama to wath.

Key Words: Friedrich von Schiller, Räuber, Kabale und Liebe, Wilhelm Tell, perception.

EINFÜHRUNG

Reisebeschreibungen geben oft mehr Einblick in eine längst vergangene Zeit, als man erwartet hätte. So geben die Aufzeichnungen des Deutschtürken Murad Efendi zahlreiche Hinweise auf das Schicksal und die Rezeptionsgeschichte Friedrich von Schillers in der Türkei. Er schreibt mit Begeisterung: "Eines Tages buchstabierte ich zu meinem nicht geringen Erstaunen aus dem arabischen Schnörkelbuchstaben besagter Riesenzettel die Worte "Räuber" und "Schiller" heraus. Ich traute meinen Augen nicht und doch, es war keine Täuschung. Schiller am Goldenen Horn! Sein von Sturm und Drang erfülltes Erstlingsdrama ins Türkische übertragen (...) (Murad Efendi, 1877, 100). Durch diese zeitlich bestimmbare Angabe stellt sich heraus, dass nicht "Kabale und Liebe", wie bisher in verschiedenen Studien behauptet wurde (Salihoğlu, 1972, 1979), sondern "Die Räuber" das erste deutschsprachige Werk bzw. Drama war, das ins Türkische übersetzt und aufgeführt wurde.

Schillers Drama 'Die Räuber' ist das erste deutsche Theaterstück, das in einer Übersetzung im Osmanischen Reich während der Tanzimat-Epoche übersetzt und inszeniert wurde. Aus der genannten Reisebeschreibung wird ersichtlich, dass Schillers 'Die Räuber' etwa im Jahre 1873 zum ersten Mal in Istanbul im Theater zu Gedik Pascha, das das einzige offizielle Theater war und Osmanisches Theater genannt wird, aufgeführt wurde. Nach der Uraufführung beschreibt

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der Premierenbesucher Murad Efendi die Inszenierung des Stückes und die Reaktion der Zuschauer folgenderweise:

"Die Scene mit dem Pater regt das Publikum an, die Flintenschüsse zum Actschluss finden lauten Beifall. Sie werden laengere Zeit fortgesetzt. Einige Bismillah! Ausrufe der Bewunderung dringen vom Parterre an mein Ohr. (...) Dies ist offenbar der Höhepunkt der Aufführung" (Murad Efendi, 1877, 104).

Wegen des revolutionären Inhalts des Werkes erhielt Schiller -wie bekannt- nach der Aufführung im Mannheimer Nationaltheater 1782 Schreibverbot und musste ins Exil gehen. Fast dasselbe Schicksal erlitten 'Die Räuber' auch in der damaligen Türkei. Denn gleich nach der Aufführung wurde das Werk einer Zensur unterworfen.

"Mein Logenpartner (...) zeigte sich sehr unruhig. Er hatte mehrmals waehrend des Actes bedenklich das Haupt geschüttelt. Ein censorisches Unwetter schien sich über Schiller, den Raeubern und Güllül zusammenzuballen. "Dergleichen Stücke sollte man nicht gestatten!" seufzte er endlich. "Sie regen unser Publikum auf" und er zog die Stirn in ernste Falten. Ich that mein Möglichstes, um seine Bedenken zu verscheuchen und Schiller's Raeuber trotz des Pelotonfeuers dem Repertoire Güllül's zu erhalten" (Murad Efendi, 1877; 105).

Der von Murad Efendi genannte Güllül, der 'die Räuber' aus dem Italienischen übersetzen und in Istanbul aufführen ließ, war Güllü Agop, der mit dem Aufbau und der Leitung des vom Staat gegründeten und unterstützten osmanischen Theaters beauftragt worden war. Der Logenpartner von Murad Efendi war Arifi Bey, der lange Zeit in Berlin das Osmanische Reich vertreten hatte und dem das deutsche Theater nicht fremd war. Arifi Bey, dem die Aufsicht und Oberzensur während des Stücks oblag, erklärte auch, welche Stücke er aus welchem Grund untersagt hatte.

"Ich ließ die Aufführung von mehreren Stücken untersagen, nicht weil ich diese für politisch gefährlich, sondern weil ich sie für schlecht und folglich bildungsgefährlich hielt. Ich habe jedoch, wenn auch ohne besondere Hoffnung auf den Erfolg, den Auftrag gegeben, daß man "Nathan der Weise" und Grillparzers "Traum ein Leben" geziemend übersetze." (Murad Efendi 1877: 96).

Aus diesen Notizen, die wir Murad Efendi verdanken, geht hervor, dass Schillers Drama wegen der Flintenschüsse auf der Bühne, d.h. aufgrund der effektvollen, realistischen Darstellung als 'Aufregung erregend' und 'bildumgsgefährlich' angesehen wurde. Da im Stück bzw. auf der Bühne mit Flinten geschossen wurde und entsprechend des Handlungsverlaufs viel Lärm und Hitze entstanden, liegt der Schluss nahe, dass die Zensurobrigkeit vor allem diese Aspekte am Stück beanstandete und es zensieren ließ.

Doch die hier vom Oberzensor aufgeführten Argumente scheinen dem Grund der Zensur nicht ganz gerecht zu werden. Die Daten der Aufführungen und ihre verschiedenen Titel zeigen ja eine andere Wirklichkeit: das Stück war nämlich, beim Theaterpublikum sehr beliebt. Offenbar wurden Inhalt und Aufführung seitens der Zensur nicht akzeptiert. Deshalb ist es angebracht, auf die eventuellen Ursachen der Zensierung und die Aufführung einzugehen.

Das Theater zu Gedik Pascha, wo Schillers die Räuber gespielt wurden, war das erste Staatstheater im Osmanischen Reich. Diesem vom Staat abhängigen und finanzierten Theater wurde der Auftrag gegeben, durch Aufführungen das "Volk zu belehren und dabei zu

ergötzen" (Tuncer, 1994, 24). Das Theater funktionierte wie ein Kulturorgan des Staates und dürfte die politische und kulturelle Sichtweise des Staates nicht übersehen.

Murad Efendi betont einmal in seiner Reisebeschreibung, dass das Schillersche Stück aus dem Italienischen ins Türkische übertragen wurde. Aus der osmanischen Theatergeschichte geht hervor, dass nur der Armenier Sirapyan Hekimyan aus dem Italienischen Übersetzungen machte. Hekimyan galt als erster Schriftsteller, der türkische Stücke in türkischer Sprache schrieb, die er dann auch selber aufführte. Hekimyan wurde in italienischen Schulen in Istanbul erzogen und studierte anschließend in Venedig. Deshalb kann man mit großer Wahrscheinlichkeit davon ausgehen, dass "Die Räuber" von Sirapyan Hekimyan übersetzt wurden. (And; 1976)

Das Stück Eşkiya Robert ("Räuber Robert"), das eine adaptierte Übertragung von Schillers 'Die Räuber' zu sein scheint, wurde nach allgemeinen Forschungerkenntnissen schon in den 1860er Jahren (etwa 1868) aufgeführt. Im Jahre 1870 wurde dasselbe Werk unter dem Titel "Robert, der Räubergeneral" (Serdar-1 Eşkiya Robert), von der Aramyan Theater-Gruppe aufgeführt. Dieses Stück wurde auch von den verschiedenen orientalischen Theatergruppen und vom "Osmanischen Theater" auf die Bühne gebracht. Die Aufführungen nach 1870 sind Wiederholungen, z.T. inhaltlich und sprachlich verändert. Das oben erwähnte erste Werk "Räuber Robert" wurde unter verschiedenen Titeln wie z.B. "Böhmischer Räuber Bernhard" (Bernard Bohemya Eşkiyaları, 1870), "Roberto, der Räuberhauptmann" (Roberto Reis-i Eşkiya, 1871), "Robert, der Räubergeneral" (Serdar-1 Eşkiya Robert, 1872-73) aufgeführt. Außerdem führte man dasselbe Werk unter dem Titel "Die schöne Amalia" (Güzel Amalya, 1880) auf (And, 1976). Auffallend sind die verschiedenen Titel des Stücks, die auf den gleichen Namen "Räuber' und den gleichen Helden 'Robert' zurückgehen.

Da die betreffenden Manuskripte und wenigen Druckexemplare des Werkes leider verloren gegangen sind, ist eine inhaltlich vergleichende Analyse an dieser Stelle nicht möglich. Aber schon die Titel der Werke, und die Daten der Inszenierungen zeigen, dass die eingangs angegebene und öfter zitierte Aufführung auf dieselbe Quelle zurückgeht, die aus dem Italienischen übersetzt und unter dem Titel "Räuber Roberto" gespielt wurde. Dass die Titel der Aufführungen mehrmals geändert wurden, könnte dadurch erklärt werden, dass man die Zensurbehörden täuschen wollte.

Diese letzte Annahme wird zudem durch folgenden Sachverhalt bekräftigt: Das Wort "Räuber" ist in der orientalischen Literatur im Allgemeinen und in der osmanischen bzw. türkischen Literatur im Besonderen ein z.T. mit positiven Assoziationen beladenes Wort und deshalb ein beliebtes literarisches Thema. Deshalb bedurfte das Stück vor und während einer Aufführung keiner besonderen Einführung oder Bekanntmachung zusätzlicher Erklärungen, um Interesse zu wecken. Die klassische türkische Literatur, besonders die Volksliteratur, in der die Bänkelsänger die größte Rolle spielten, und die moderne türkische Literatur ist voll von solchen Charakteren bzw. Volkshelden, die wegen erlittenen Unrechts durch die Herschenden in die Berge fliehen und als Räuber gegen den despotischen Herrn bzw. gegen das Unrecht kämpfen. Das Verlockende war es natürlich, ein wildes Leben in den Bergen zu führen, das Abenteuerliche der Freiheit zu geniessen, eine eigene Macht- und Rechtssphäre zu bilden, das Recht der Unterdrückten zu verteidigen und ein heldenhaftes Leben zu führen.

In der türkischen Literatur wurden die Taten desjenigen, der wegen eines Unrechts als Aussätziger in die Berge flieht und gegen einen Despoten kämpft, als Heldentaten angesehen und deshalb überwiegend positiv dargestellt. Ein solcher Held kämpfte in den Augen des Lesers oder Zuschauers nicht nur für seine individuellen Rechte, sondern auch für die Rechte

aller Unterdrückten. In den 50er Jahren des 20. Jahrhunderts erreichte diese themengeschichtliche Tendenz ihren Höhepunkt. Yaşar Kemal z.B. schuf in seinem Werk 'Ince Memed' (Memed mein Falke) eine mythologische Figur, einen Helden, der aufgrund der Unterdrückung wiederum in die Berge entflieht und für das Volk bzw. gegen den despotischen Herrscher kämpft.

Nicht alle Autoren jedoch zeigen eine positive Haltung gegenüber einem Räuber. Als Antwort auf Yaşar Kemals Werk 'Ince Memed' schrieb Kemal Tahir seinen Roman 'Rahmet Yolları Kesti' (Rahmet hat überfallen), in dem der Protagonist aus persönlichen Gründen zum Räuber wird. Auf dieser Grundlage entstand in der türkischen Literatur zum ersten Mal ein ungewöhnlicher Räuber, ein Antiheld (Kaplan, 2005, 13-26).

Auf dieser Basis entstand in der türkischen Literaturgeschichte eine Literatur-thematische Differenzierung über den Helden und den respektierten Antihelden. Ein Antiheld ist derjenige, der prinzipiell aus persönlich eigenmächtigen Anlässen rebelliert und sich der herrschenden Ordnung widersetzt. Der Held dagegen ist derjenige, der vor einem sozialen, wirtschaftlich oder juristisch motivierten Unrecht ideale Inhalte verteidigt und so zum Rebell wird. Aus der perspektife des Staates aber gibt es keinen Unterschied zwischen dem persönlich und sozial motivierten Rebellen.

Schon in der osmanischen Zeit entstand in diesem Kontext eine begrifflich inhaltliche Distanzierung. Wer gegen eine staatliche bzw. rechtliche Ordnung kämpfte oder gegen das osmanische Herrscherrecht Krieg führte, wurde von Staats wegen als "Räuber", als politischer Rebell bezeichnet. Dieser Begriff verbürgerte im staatlichen Bereich, sowohl im osmanischen als auch im türkischen, besonders in der politischen Sprache nicht mit dem literarischen sondern mit dem politischen Inhalt. Griechenland wurde z.B. Räuberstaat genannt, weil auf Seiten der Griechen in den 70er Jahren des 19. Jahrhunderts mit organisierten Gruppen gegen den Osmanischen Staat gekämpft wurde. Als Griechenland im Jahre 1869 Kreta besetzte, wurde diese widerrechtliche Handlung auf einer internationalen Verhandlung in Paris als "räuberischer Fall" bezeichnet, und Griechenland wurde beschuldigt als "ein Staat, der das Räuberische als nationalen Beruf erkannte und einführte" (Özgürel 2007; 13).

Schillers 'Die Räuber' entstanden in Deutschland in einer Zeit, in der Feudalismus herrschte, soziale und politische Konflikte zwischen dem Individuum und dem Staat politischer Alltag waren, und der damit eng verbundene Freiheitsgedanke immer lauter wurde. Dieselbe historisch-politische Tendenz war auch in der osmanischen Zeit zu verzeichnen, als Schillers "Die Räuber" inszeniert wurden. Die sozial-politische Parallelität, die die soziale Rezeptionsgeschichte dieses Werkes im Osmanischen Reich mitbestimmt hatte, könnte wie folgt zusammenfassend beschrieben werden: Das Osmanische Reich als Vielvölkerstaat erlebte im 19. Jahrhundert eine unruhige Periode bzw. Aufspaltung, insbesondere auf dem Balkan, aber auch in anderen Gebieten. Die Minderheiten auf Balkan rebellierten, kämpften für ihre Autonomie, rebellierten in den Wäldern gegen das osmanische Heer und erklärten ihre Unabhängigkeit, während die osmanischen Intellektuellen im Inneren vielfältige politische und kulturelle Reformen, individuelle Freiheiten und einen selbständigen nationalen Staat forderten. Die Rebellion Karls gegen die bestehende Ordnung und das Patriarchat, seine Idee, dass sich jeder für das Recht einzusetzen habe und für die Freiheit kämpfen müsse, seine Flucht in die Berge usw. könnten von den Machthabern im Rahmen ihrer eigenen innenpolitischen Schwierigkeiten auch als 'aufreizend' bewertet worden sein. Dass das Stück, das damals unter dem Volk sehr beliebt gewesen zu sein scheint, zu verschiedenen Zeiten häufig unter verschiedenen Titeln aufgeführt wurde, zeigt, dass es im staatlichen Bereich negativ, aber unter den Theaterbesuchern bzw. im kulturellen Bereich positiv bewertet wurde.

Karl Moors Kampf als Sohn, der aufgrund einer "ungerechten Handlung" in die Berge flieht und für ein höheres, ideales Recht kämpft, könnte kulturell und sozial als legitim aufgefasst worden sein und ließ ihn als Helden erscheinen. Aus staatlicher Sicht aber ist er ein Rebell und ein Anti-held. Denn der Vater oder die Rolle des Vaters besitzt im osmanischen Leben den Status eines Padischahs: "Wie der Padischah im Serail, so ist der Vater zu Hause. So gibt es eine Parallelität zwischen Vater und Padischah" (Fındıkoğlu 1999; 619-659). Aus diesem Grund hat ein Sohn kein Recht, gegenüber seinem Vater zu rebellieren und gegen das väterliche Haus zu kämpfen, auch wenn von dort Unrecht ausgehen sollte.

Obwohl Karl Moor in diesem Stück als ein Held erscheint, hatte Schiller den Charakter Karl Moor eigentlich als Anti-Helden konzipiert, weil er gegen Menschen Unrecht begeht und durch seine Auflehnung eine Un-Ordnung entsteht. Auch Karl schafft kein Recht und keine Ordnung. Deshalb ergibt er sich am Ende dem Recht der bestehenden anerkannten sozialen Ordnung. Trotz dieser Konzipierung der Figur Karl Moor als Antihelden ist interessant, dass dieses Werk seitens des osmanischen Staates nicht wohlwollend aufgenommen wurde.

Schillers die Räuber ist eigentlich ein Antiheld im literarischen Sinne, wurde aber als ein Held im politischen Sinne angesehen. Es gibt einen Spruch im osmanischen Rechtsleben, der die Rezeption des Anti-Helden ins Licht setzen kann: "Ein schlechtes Beispiel stellt keinen Präzedenzfall dar" (Su-ni misal emsal teşkil etmez). Dieser juristische Satz besagt, dass ein Anti-Held nicht als Held betrachtet und nicht positiv dargestellt werden darf. Damit lässt sich die staatliche Haltung gegenüber Schillers Drama erklären: Karl Moor war zwar ein literarischer Anti-Held konnte jedoch als Held im alltäglich politischen Geschehen verstanden werden.

Nicht nur Übersetzungen aus dem Westen, sondern auch einige türkische Stücke wurden in den gleichen Jahren wegen ihres politischen Inhalts untersagt. Im selben Jahr, nämlich 1873, wurde z.B. Namik Kemals Werk 'Vaterland oder Silistre' (Vatan yahut Silistre), das erste türkische Bühnenprodukt, als 'aufreizend' betrachtet und aus diesem Grund verboten (Murad Efendi 1877, 94-95). Arifi Bey z.B. betrachtete dieses Werk als eine "dialogisierte Darstellung einer militärischen Episode, in welcher Kanonen und Schanzkörbe ihr Unwesen treiben und in welcher mit Feindesblut, Vaterland, und Kriegsruhm Ball gespielt wird' (Murad Efendi 1877, 94-95). Nach der Aufführung hatten die Zuschauer für Namik Kemal und gegen den Staat protestiert. Gleich danach wurde Namik Kemal verhaftet und nach Zypern ins Exil geschickt. Interessant ist diese Entwicklung, weil Kemal dieses Werk auf Wunsch Güllü Agops im Gedik Paşa Theater aufführen ließ, wo auch Schillers die Räuber aufgeführt wurden.

Namık Kemal erwähnte Schillers Namen zum ersten Mal in einem seiner Briefe und bezeichnete ihn als den wichtigsten und berühmtesten Dichter Deutschlands. Er musste Schillers Namen und 'Die Räuber' durch diese Aufführung gekannt haben. Namık Kemal war beauftragt, mit Güllü Agop, der die Räuber inszenierte, zusammenzuarbeiten und das Theater zu Gedik Paşa zu reorganiseren. Er arbeitete hier als Ausbilder, gab für Schauspielkünstler Diktionsunterricht. Namık Kemal war auch ein romantischer Idealist, der Themen wie Vaterland, Freiheit und Recht in seinen Werken behandelte. Aus einem Vergleich zwischen Schiller und Namık Kemal geht hervor, dass diese Begriffe bei beiden Autoren ganz nahe stehen und sich fast überdecken (Salihoğlu 1979, 60).

Das Theater im Osmanischen Reich, das als eine 'Bildungsanstalt' der Modernisierung im westlichen Sinne angesehen wurde, funktionierte auf dieser praktisch-ideologischen Basis, die bei der Wahl der Aufführungen eine große Rolle spielte. Das Theater und die Dramen, die vom

Staat gefördert wurden, mussten 'nützliche' Stücke sein, damit der Zuschauer gebildet, d.h. 'europäisiert' werden konnte. Die Theaterstücke und Dramen, die übersetzt und inszeniert wurden, mussten ein Beispiel des westlichen Lebens und Denkens bzw. ein reales 'Modell' vorstellen und anbieten (Pekman 2002, 9-10). Staatlich nicht akzeptierte Ideen oder Themen konnten daher nicht aufgeführt werden.

Modernisierung und Europa wurden zusehends Zauberworte, die den Glauben an politische Umwandlung, soziale Veränderung und wirtschaftliche Entwicklung des Landes stärkten. Um die Modernisierung und Europäisierung verbreiten zu können, haben die osmanischen Intellektuellen Vereine gegründet, Zeitungen und Zeitschriften herausgegeben, Theaterstücke aus dem Westen übersetzt, inszeniert und selbst Dramen geschrieben. Fast alle Intellektuellen und Schriftsteller verwendeten in ihren Werken die Begriffe 'Nation', 'Vaterland', 'Freiheit', 'Individuum', 'Revolution'. Literatur war daher eine "engagierte Literatur" im Dienste der Meinungsbildung der Bevölkerung.

Trotz dieser positiven Entwicklungen in staatlichen, sozialen und kulturellen Bereichen muss man aber festhalten, dass es eine divergente Entwicklung zwischen dem staatlichen und kulturellen Bereich gab. Die staatliche Macht wollte den bisherigen privilegierten Status beibehalten, während die Intellektuellen nach einer weiteren Reformierung bzw. einer Revolution im staatlichen und nach Freiheit im kulturellen und politischen Bereich strebten. Diese Diskrepanz zwischen dem offiziellen und privaten Bereich spiegelte sich auch im kulturellen Bereich als Konflikt wider. Im Zentrum dieser Konflikte steht die Geschichte der übersetzten und inszenierten europäischen Werke, die zeitgenössische Werte zum Inhalt hatten und zu Diskussionen führten. Auch Schillers 'Die Räuber' und ihre Rezeptionsgeschichte in der Türkei sollten im Rahmen dieser Diskrepanz betrachtet werden.

Das Interesse an Schillers 'Die Räuber' blieb aber immer wach. Nach der Zensur des Stückes im Jahre 1873 wurde es zuletzt 1880 unter dem Titel "Die schöne Amalia" aufgeführt. In den Jahren 1925-1926 wurde das Werk von Hasan Cemil Çambel noch einmal ins Türkische übersetzt, diesmal nicht aus dem Italienischen, sondern aus der Originalsprache. Die Aufführung fand aber erst 1930 statt. Interessanterweise finden sich keine Kritiken oder Renzensionen aus dieser Zeit, weder in Zeitschriften noch in Zeitungen. Angesichts der innenpolitischen Entwicklungen in der Türkei zwischen 1923 und 1930 könnte man behaupten, dass der Inhalt des Stückes seine aktuelle Brisanz verloren hatte, denn die türkische Republik war aus einer nationalen Rebellion gegen die osmanische Herrschaft und gegen die Besetzung türkischen Territoriums entstanden. Am 29. Oktober 1923 wurde die türkische Republik als unabhängiger Staat gegründet und bis 1933 führte der neue Staat Reformen durch, die das Leben im europäischen Sinne prägen sollten. Aus diesem Grund, so ließe sich anführen, passte der Inhalt des Stücks bzw. die Rebellion der Jugendlichen nicht mehr zu den innenpolitischen Konstellationen der damaligen Türkei.

In den 50er Jahren des 19. Jahrhunderts setzt sich die erste Phase der literarischen Rezeption der Schillerschen "Räuber" durch. Melahat Özgü, die erste Germanistin in der Türkei und Leiterin des Instituts für Theater an der Universität Ankara, klagte darüber, dass dieses Werk in den fünfziger Jahren missverstanden wurde. Sie zitierte Muhsin Ertuğrul, Leiter des Staatstheaters nach der Revolution 1923 bis 1972 (And 1992, 138): "Diejenigen, die über Shakespeare und Schiller schlecht sprechen, sind Analphabeten. Diese können wir übersehen" (Özgü 1959, 82). Offenbar war man sich noch uneinig, was die Aufführung Schillers Stücke betraf. Nach Özgü sind auch die Ausführungen Mme de Stäels über 'Die Räuber', dafür verantwortlich, dass man dieses Werk missverstanden und aus diesem Grund nicht in die Schulbücher aufgenommen hat. Mme de Stäels behauptete –so Özgü- in ihrem

1945 ins Türkische übersetzten Werk 'Über Deutschland', die Jugend in Deutschland werde von diesen Charakteren und dem Leben dieser Räuberbanditen beeinflusst und ahme sie nach. Die Liebe zur Freiheit habe zu komischen Aufständen geführt, die moralisch unakzeptabel seien" (Özgü 1959, 83). Özgü behauptet daher, dass Mme de Stäels falsche Ausführungen, dass die Jugend diesen Helden nachgeahmt habe, auch die Rezeption dieses Werkes im bildungspolitischen Bereich negativ bestimmt habe. Man muss aber bedenken, dass nicht nur Mme de Stäels Ausführungen, sondern auch ein anderes Werk einen negativen Einfluss auf die Rezeption von Schiller in der Türkei ausgeübt hat. Man bezeichnete in einem Nachschlagewerk Friedrich von Schiller. Hayatı ve Eserleri (Friedrich von Schiller: Leben und Werk) "Die Räuber" als ein ungewöhnliches Drama, und Kabale und Liebe als eine Komödie (Salihoğlu 1979, 61). Salihoğlu ist der Meinung, dass man Friedrich Schiller stets auf der Grundlage der französischen Übersetzungen, Quellen und Kritiken gelesen, die damalige Rezeption übernommen habe und keine eigene Perspektive bilden konnte.

Anlässlich der Feierlichkeiten zum 150. Gedenkjahr wurde im Ankaraner Staatstheater eine Schillernacht veranstaltet und bei dieser wurde nur eine Szene aus 'den Räubern' gespielt. Im Jahre 1956 inszenierte Walter Thomas das ganze Stück in Ankara. Danach wurde es im Jahre 1970 und zuletzt im Jahr 2000 im Staatstheater zu Istanbul unter der Regie von Bozkurt Kuruç gespielt. Die meisten Rezensionen bezeichnen das Werk als klassisch und sehen in ihm einen wichtigen Repräsentanten der klassischen deutschen Literatur. Wenn man dieses Werk in der Türkei klassisch nennt, so bedeutet das, dass man damit "zur ersten Klasse gehörig" meint. Das Stück ist ja keineswegs 'klassisch' im stilistischen Sinne. Man kritisiert nur die Art der Inszenierung und die Schauspieler, die aufgrund einer falschen Regie 'gefühllos' seien. In den Rezensionen betont man die Auffassung, dass man dieses Werk des Sturm und Drangs mit den Augen der Moderne betrachten werden will. (http://detay.gsu.edu.tr/haber.asp?ID=476).

'Die Räuber', eine Geschichte der Rebellion gegen Ungerechtigkeit, ist sowohl wegen ihres gefühlsbeladenen Themas als auch wegen der politischen These ein klassisches Werk, das noch heute viele Diskussionen auslöst''(http://detay.gsu.edu.tr/haber.asp?ID=476 (...) "In dem Text, der gemäß der bekannten Tragödien-Form verfasst wurde, wird neben der Rebellion eines empfindsamen Helden gegen die bestehende Ordnung auch das diese Rebellion unterstützende Volk als Motiv behandelt. Was Räuber Karl erlebte, ist nichts anderes als Robin Hood. (...) Man müsste die klassischen Werke modernisiert inszenieren, was bei der letzten Inszenierung besonders fehlte(http://st.fatih.edu.tr/~fatihatalay/tiyatro.htm)

Wie aufgeführt bezeichnet man Karl Moor als einen "empfindsamen Helden", der mit dem in der Türkei sehr bekannten Helden Robin Hood identifizert wurde. Diese Betrachtung des "empfindsamen" Helden ist im Grund nicht unterschiedlich von der des Helden aus "persönlichen" Gründen. Anlässlich einer neuen Übersetzung des Stückes ins Türkische im Jahre 2002 erschien eine Rezension des Werkes, die eine intertextuelle, aber vor allem eine religiöse Deutungsweise in den Vordergrund stellt. Diese Rezension gewinnt besonders an Wichtigkeit, weil sie innerhalb der Rezeptionsgeschichte 'der Räuber' eine intertextuelle und religiöse Lese-Perspektive beeinhaltet.

In diesem Werk, das auf dem Kampf zwischen dem Guten und Bösen, Gerechtigkeit und Unterdrückung aufgebaut wurde, ist beachtenswert, daß der Schriftsteller eine dichte Sprache von den Offenbarungsbüchern verwendet. Im Werk sprechen die Helden häufig Bibelverse aus. Und wieder bei der Handlung werden einige Ereignisse und lehrreiche Geschichten aus dem alten und neuen Testament entlehnt. Zwei wichtige Ereignisse, die das Zentrale des Werkes bilden, treten als ähnliche fiktive Ereignisse aus dem Alten und Neuen Testament auf. Der Konflikt zwischen Karl und seinem Vater erinnert z.B. an die lehrreiche Geschichte vom

"verlorenen Sohn" in der Bibel. Und der Kampf zwischen Karl und Franz deutet auf den Kampf zwischen Joseph und seinen Brüdern hin. Die Räuber ist daher eine moderne Joseph-Geschichte (Beyaztaş 2002; Vorwort).

Man müsste demnach die Geschichte der Rezeption von Schillers 'Räubern in der türkischen Literatur- und Sozialgeschichte in zwei Phasen einteilen: eine vorrevolutionäre und eine nachrevolutionäre. Die staatliche und bürgerliche Ordnung im osmanischen Staat war teilweise aufgelöst. Aus diesem Grund scheint die Figur Karl Moors als ein Rebell für den Staat nicht geeignet und nicht vorbildhaft, um die Reformen zu unterstützen. Nach der Revolution bzw. nach der Gründung der türkischen Republik strebte man danach, eine Einheit zwischen Nation und Staat zu bilden, was auch Schillers Staatsideal war. Diesem idealen Staat, bei dem das Volk und der Staat eine Einheit bilden, einen nationalen Helden erforderlich war, steht die Figur des Räubers entgegen. Denn Karl Moor stellt sich gegen die herrschende Ordnung, wehrt sich gegen das Unrecht, das ihm der Vater und die Gesellschaft zugefügt haben. Deshalb war Karl Moor mehr ein Volksheld als ein Nationalheld. Dass er rebellierte und dadurch Gesetzlosigkeit hervorbrachte, muss dazu beigetragen haben, dass das Werk – von staatlicher Seite- auf der Bühne als 'gewalttätig' eingestuft wurde und der Held in den Augen des Staates und der Regierung 'nicht nützlich' und für die Bildungspolitik 'nicht vorbildlich' erschien.

Man muss hervorheben, dass Karl Moor eigentlich als ein Anti-Held eingestuft werden kann, den man in der Inszenierung gezeigt haben muss. Trotzdem ist aber akzeptabel, dass Karl Moors Charakter zum Teil revolutionär, aber nicht rational ist, was auch ein Grund dafür sein dürfte, weshalb er in der nachrevolutionären Phase auf staatlicher Seite als unakzeptabel bzw. nicht vorbildhaft erschien. Denn man pflegte sowohl im staatlichen als auch im gesellschaftlichen Leben einen Positivismus und Rationalismus, die als Basis der türkischen Revolution und der Modernisierung anerkannt waren.

Schillers 'Die Räuber' und die mit der Hauptfigur zentral behandelten 'Idee der Freiheit', 'die Rebellion gegen die bestehende Ordnung', 'gegen die Vaterschaft' und das persönliche Recht, das später 'Unrecht' stiftet, könnte sowohl in der vorrevolutionären als auch in der nachrevolutionären Phase immer den staatlichen Konstellationen, mithin der Freiheits-Idee, der Legitimation der Rebellion widersprochen haben. Diese Behauptung erhärtet sich, wenn wir Schillers andere Dramen und deren Rezeption in der Türkei mitberücksichtigen.

Wenn man die Geschichte der Dramen von Schiller verfolgt, sieht man, dass die drei Werke, 'Die Räuber', 'Kabale und Liebe' und 'Wilhelm Tell' gemeinsame Themen wie 'Rebellion', 'Revolution', 'Recht', 'Freiheit' aufweisen, aber in der türkischen Literaturgeschichte unterschiedlich rezipiert worden sind.

Was 'Die Räuber' mit 'Kabale und Liebe', mit 'Wilhelm Tell' verbindet, lässt sich folgenderweise schematisieren: Die Hauptfiguren sind Rebellen, lehnen die vorgefundenen Gesellschaftsstrukturen ab und wollen das Recht unrechtmäßig herstellen.

Schillers 'Kabale und Liebe' wurde zum ersten Mal im Jahre 1875 von Hasan Bedrettin und Mehmet Rifat unter dem Titel "Hüd'a ve Aşk" ins Türkische übersetzt. Die Geschichte der Übersetzung sind sich in Murad Efendis Reisebeschreibung festgehalten. "Er (Güllül) theilte mir mit, dass zwei Übersetzer damit beschäftigt wären, Kabale und Liebe zu übersetzen"(Murad Efendi, 1877, 107). Der Ausgangstext der Übersetzung war Alexander Dümapers Übersetzung ins Französische (Intrigue et Amour). 1927 wurde "Kabale und Liebe" aus der deutschen Sprache als "Hile ve Aşk" ins Türkische übersetzt und 1928 aufgeführt. Lütfi Ay beschreibt die Reaktionen im Publikum wie folgt: "Unser Land hat den Krieg schon

hinter sich und hatte sein allseitiges Verhältnis mit dem Sultanat neu gebrochen, weshalb das Werk beim türkischen Zuschauer einen großen Beifall gefunden hat"(Özgü 1959, 80). Der Grund dafür liegt nach ihm auch darin, dass die Handlung des Werkes einen Klassenkampf beinhalte, dessen Geschichte gegen Unterdrückung und Absolutismus eine Herausforderung sei. Deshalb habe die Handlung die Zuschauer in Bewunderung versetzt.

'Kabale und Liebe' wurde von Muhsin Ertuğrul, dem oben erwähnten Leiter des Staatstheaters, in den 50er Jahren noch einmal aufgeführt. Es wurde 1951 zum dritten Mal übersetzt und in der Serie von "Übersetzungen aus der Weltliteratur, Deutsche Klassiker" vom Erziehungsministerium herausgegeben und ein Jahr vor dem Erscheinen der Übersetzung wurde es unter der Regie von Renata Mordo im Staatstheater aufgeführt. Einige Kritiker wie Zahide Özveren klagten damals darüber, dass Schiller als Dramatiker den gewünschten Beifall in der Türkei noch nicht gefunden habe (Özveren, 1951). Die Kritikerin nennt dafür keine Gründe.

Diese Übersetzung wurde 1955 anlässlich der Feierlichkeiten zum 150. Todestag Schillers, durch Unterstützung der deutschen Botschaft und des Bürgermeisters von Istanbul noch einmal in Istanbul inszeniert. Anlässlich der Inszenierung dieses Werkes im Jahre 1950 schreibt Lütfi Ay noch eine Rezension, die einen Vergleich ermöglicht: "In dieser neuen Inszenierung habe ich gesehen, dass die Zuschauer nicht von Bewunderung und Beifall wie damals (1928) erfüllt waren." Der Grund hierfür sei, dass sich bei den Zuschauern ein ausreichendes Theaterbewusstsein gebildet habe. Doch beim Zuschauer habe das Interesse für "Kabale und Liebe", für den Konflikt zwischen dem Bösen und Guten, das Interesse für Liebe und Ideale nicht verringert (Özgü, 1959, 81). Daraus können wir schließen, dass Absolutismus und Unterdrückung kein Diskussionsthema im kulturellen Leben der nachrevolutionären Zeit waren und die Zuschauer diese Themen in neuen Formen sehen wollten. Der Konflikt um Klassenzugehörigkeit, um Klassenunterschiede und dessen hindernde Rolle für die Liebenden wurde aber mehr beachtet. Also nicht der politische, sondern der soziologische Hintergrund und die Familienproblematik fanden Beachtung. Deshalb wurde das Werk als ein Familien-Melodrama angesehen.

Was Schiller in der Türkei berühmt und populär gemacht hat, war sein letztes Drama 'Wilhelm Tell'. Die Übertragung dieses Werkes ins Türkische erfolgte, wie bei den anderen Stücken, wieder aus dem Französischen, und zwar im Jahre 1896. Die Übersetzung erschien in Kairo in osmanischer Sprache. Da das Werk aus dem Französischen übertragen wurde, lautet der Titel dieser Übersetzung Giyomtel (Französisch: Guillaume Tell). Das Werk wurde im Vorwort der Übersetzung als ein "Beispiel der vollkommenen Menschlichkeit" bezeichnet. Man wolle diese 'Vollkommenheit, diese Menschlichkeit' durch die Übersetzung 'suggerieren' und dem türkischen Leser schmackhaft machen.

"Wilhelm Tell" wurde aus der Originalsprache erst im Jahre 1922 von Kurşunlu Zade Raşit mit dem originalen Titel übersetzt. Im Vorwort wird das Ziel der Übersetzung wie folgt beschrieben: "Dieses Werk zeigt, wie das schweizerische Volk gegen die Unterdrückung Österreichs und für die Freiheit des eigenen Volkes gekämpft hat. Dieses wenig von den historischen Begebenheiten abweichende Werk habe ich für die Schulen und für die Inszenierungen in Schulen für nützlich gehalten und es aus diesem Grund übersetzt" (Özgü 1959, 84).

Vom gleichen Ziel geleitet, wurde das Werk 1934 noch einmal ins Türkische übertragen und diesmal von Mustafa Reşit (Özgü 1959, 84). Diese Übertragung, die auch als eine Adaptation angesehen wird, vereinfacht die Handlung und die Sprache, weil die Übersetzung für die

Schule gedacht und vorgesehen war. Man appelliert im Vorwort direkt an die Leser: "Während ihr dieses Buch lest, werdet ihr sehr gut verstehen, was Vaterlandsliebe heißt und wie die Menschen, die zu Sklaven gemacht wurden, für ihre Freiheit gekämft haben. (...) Jede Zeile dieses Buches wird euch an unseren eigenen Freiheitskrieg erinnern. Ihr werdet der Zeiten, in denen unser Land von den Feinden besetzt war, gedenken und euch an die heilige Rebellion, den Aufstand in unserem Land erinnern" (Özgü 1959, 84).

Zur Verdeutlichung der türkischen Revolution, der Freiheitskrieg wurde 'Wilhelm Tell', der Aufstand und die Rebellion der Schweizer als vorbildlich erachtet und bildungspolitisch als nützlich angesehen und gewürdigt. Aus diesem bildungspolitischen Grund wurde "Wilhelm Tell", der auch heute in der Türkei noch als 'Giyom Tell' bekannt ist, sehr intensiv rezipiert und in die Schulbücher aufgenommen.

SCHLUSS

Aufgrund der Rezensionen könnte man folgenden Schluss ziehen: Karl Moor revoltiert gegen das ungerechte Handeln seines Vaters. Seine Empörung ist —wenn man sich die damalige türkische Familienstruktur vor Augen hält- unzulässig, weil er in erster Linie gegen seinen Vater rebelliert. Er hat, so scheint es, kein Recht zu rebellieren. Die Motivation der Rebellion und der Freiheitsgedanke, die individuell sind, entsprechen nicht der türkischen Gesellschaftstruktur und der Staatsidee der damaligen Zeit. Dagegen gilt Wilhelm Tell als ein Freiheitsheld. Freiheit wird aber nicht als Freiheit eines Einzelnen, sondern vielmehr als Freiheit eines Volkes und darüber hinaus als Unabhängigkeit eines Staates verstanden. Wilhelm Tell wurde aus diesem Grund zu einem Symbol des national-freiheitlichen Helden und der Unabhängigkeit erklärt. Dies war ja auch der Ruf des türkischen Staates und das Ziel der Bildungspolitik seit der Gründung der Republik im ersten Viertel des 20. Jahrhunderts.

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ANALYSE COMPARATIVE DES ERREURS DUES AUX DIVERGENCES SYNTAXIQUES ENTRE L'ANGLAIS ET LE FRANÇAIS

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ABSTRACT

This study is prepared to investigate students'errors in a comparative way, the errors of students whose foreign languages (L2) is English and second foreign language (L3) is French, that result from negative transferring to French language from knowledge of English particularly knowledge of syntax of English. According to the survey conducted on January 2011, the subject matter of this study is the students whose first language is english about 98% and who are from French Language Teaching Department in the Faculty of Education in Gazi University. Midterms, final exams and students'homework were investigated meticulously in the academic years of 2009-2010 and 2010-2011 to designate error types that students make frequently, resulted from English syntax. Specified errors were classified and dealt with sample. The study reveals that the identified errors results from the nouns, adjectives, adverbs, pronouns, relative clauses and possesive adjectives' different usage in English and French syntactically and students'tendency to transfer their knowledge of English to French negatively. Therefore the identified errors result from the negative transferring between two languages. The differences of syntax topics are not limited. However, due to the limitations in this study, we mention about the differences briefly.

Key Words: Syntactic differences, Analysis of errors, Negative transfer.

RÉSUMÉ

Cette étude se propose d'analyser comparativement les erreurs les plus fréquentes dues aux divergences syntaxiques entre l'anglais (L2) et le français (L3). Les étudiants de la première année du Département de la Langue Française de la Faculté de Pédagogie de L'Université Gazi constituent la population de cette étude. 98% de ces apprenants qui ont étudié le français pendant un an dans les classes préparatoires sont anglophones. En vue de la constitution du corpus, les copies d'épreuves et de devoirs écrits appartenant aux années scolaires 2009-2010 et 2010-2011 ont été étudiées minutieusement et les sujets qui posent des difficultés ont été répertoriés et classés. Cette étude a révélé que l'anglais et le français représentent des divergences syntaxiques dans l'utilisation du nom, des adjectifs (possessifs, indéfinis), de l'adverbe, des pronoms (personnels, relatifs, possessifs) et que les apprenants transfèrent négativement leurs acquisitions en anglais au français, d'où proviennent la plupart des erreurs relevées.

Mots Clés: Les divergences syntaxiques, l'analyse d'erreurs, le transfert négatif.

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1. INTRODUCTION

Dans le domaine de la didactique des langues étrangères, il a été effectué, jusqu'à nos jours, beaucoup de recherches comparatives dont le but principal est de rendre plus facile et compréhensible aux apprenants la maîtrise de la langue à acquérir. Quand on étudie l'histoire des études contrastives, on constate que celle-ci se prolonge jusqu'aux années 50. En 1957, R.Lado, disciple de C.C.Fries, rédige un livre intitulé "Linguistics Across Cultures" qui est considéré comme le début des recherches dans ce domaine. Selon Lado, découvrir et résoudre la plupart des problèmes d'apprentissage peut se faire en comparant les structures phonologiques, morphologiques, syntaxiques et lexico-sémantiques de la langue source et de la langue cible. "Sur la base de ces comparaisons, il est possible d'établir des progressions tenant compte des différences et des similitudes entre les deux langues et des difficultés inhérentes d'apprentissage" (Besse et Porquier, 1991, p.201).

Lorsqu'il est question de l'enseignement/apprentissage d'une nouvelle langue, le recours à la langue maternelle (LM) ou aux langues déjà apprises ainsi que le transfert des connaissances antérieures sont inévitables. Selon la théorie de l'interférence "ce qui est proche ou semblable est facile à apprendre, ce qui est différent donne lieu à un transfert négatif ou donc à des fautes" (Marquilló Larruy, 2003, p.64). Les études faites en Turquie traitent généralement des erreurs provenant des divergences propres aux divers systèmes du turc et du français (Alan, 2005; Özçelik, 2006; Topçu Tecelli et Özçelik 2007), mais très peu analysent celles qui sont dues aux divergences syntaxiques entre l'anglais (L2= langue 2) et le français (L3= langue 3), d'où l'originalité de cette présente étude.

Quoique le français et l'anglais fassent partie de la même famille de langues, dite indoeuropéenne, les groupes auxquels ils appartiennent sont différents: l'anglais prend place dans le groupe germanique et le français dans la branche italique du groupe italo-celtique (Grévisse, 1986, p.10). Il existe donc des divergences dans les systèmes graphiques et phonétiques/phonologiques, syntaxiques, morphologiques ainsi que lexico-sémantiques des deux langues.

2. MÉTHODOLOGIE

2.1. L'Objectif

Vu l'impossibilité d'analyser toutes les erreurs provenant des divers systèmes des deux langues, cette présente étude a pour objectif de souligner surtout celles qui proviennent du transfert négatif, dit l'interférence au niveau des divergences syntaxiques, entre le français et l'anglais. Pour ce faire, elle vise d'abord à traiter la notion de "transfert négatif et positif", ensuite à expliquer les erreurs syntaxiques dans un langage clair et précis, puis à en montrer les causes éventuelles et enfin à fournir un travail de référence utile et agréable et des propositions pédagogiques qui aideraient les apprenants anglophones à acquérir une bonne maîtrise du français L3.

2.2. La Population

La population de cette étude est limitée à 124 étudiants du Département de la Langue Française de la Faculté de Pédagogie de l'Université Gazi. Selon l'enquête que nous avons menée en janvier 2011, l'anglais est, par statut, la première langue étrangère de ces apprenants de français (98%).

2.3. La Collecte des Données

Cette étude a été élaborée à partir d'un relevé systématique des erreurs syntaxiques les plus graves et les plus fréquentes, c'est-à-dire; à partir des points de grammaire les plus difficilement assimilés par un anglophone. Nous devons souligner que, outre les copies d'épreuves et de devoirs écrits des cours d'expression écrite, de nombreuses questions que nous posent chaque instant nos apprenants ainsi que nos expériences professionnelles ont énormément contribué à élaborer cette étude.

3. CADRE THÉORIQUE

3.1. Le Transfert

La thèse du transfert, nourrie des concepts béhavioristes, est que c'est dans une comparaison des langues et des cultures, sources et cibles, qu'on peut résoudre les difficultés des apprenants ou leur promouvoir les facilités pour l'apprentissage d'une nouvelle langue.

Pour ce qui est de nos apprenants Turcs, l'acquisition d'un nouveau système, le français deuxième langue étrangère (ou L3), engendre des transferts positifs ou négatifs, compte tenu de l'influence du turc et de l'anglais. Pour eux, le transfert ne peut s'opérer alors qu'entre ce qui est déjà acquis (LM et L2) et les données nouvelles (L3). Les effets de similitudes et de différences entre la langue source et la langue cible sont conçus respectivement en termes de transferts à résultats positif et négatif.

3.1.1. Le Transfert Positif: Facilitations

Le transfert consiste donc à réutiliser dans l'apprentissage les habitudes et les savoirs acquis préalablement. Selon l'hypothèse originelle de l'analyse contrastive (Lado, 1957), la similitude entre les structures de deux langues facilite l'apprentissage alors que leur différence tend à le rendre difficile dans la mesure où l'apprenant doit modifier une habitude enracinée dans son comportement verbal. Dans ce cas, une acquisition antérieure facilite l'amélioration de l'efficience dans l'exécution ou l'apprentissage de la tâche qui suit. Les effets positifs du transfert peuvent être désignés en termes de *facilitations*.

3.1.2. Le Transfert Négatif: Interférences

On peut parler du transfert négatif au cas où l'influence de l'acquisition d'une première tâche se traduirait par une diminution de l'efficience de la seconde. C'est-à-dire, les structures contrastantes poseront des problèmes d'apprentissage et provoqueront des erreurs dues au transfert négatif. On devrait donc pouvoir prédire les erreurs à partir d'une analyse contrastive des deux langues. Les effets négatifs sont reconnus sous le nom d'*interférences*.

L'interférence, c'est-à-dire, la forme erronée en langue étrangère dont l'origine vient d'une sorte de calque de la langue maternelle ou de la première langue étrangère, (en l'occurrence de l'anglais dans notre étude), a en effet été longtemps attribuée à un transfert de celle-ci à la langue cible. On ne peut pas mettre en doute ce que nous repérons trop souvent dans les productions des apprenants. Dommergues suggère même que « toute erreur possède (...) deux composantes: une composante d'interférence et une composante d'analogie, dans des proportions variables» (Besse et Porquier, 1991, p.210). Ce qui est similaire est facilement

transféré, donc facile à apprendre ; ce qui est différent, donne lieu à un transfert négatif (interférence) et donc à des erreurs, manifestations des difficultés d'apprentissage.

Le développement de la pragmatique linguistique et des linguistiques du discours en général, donne maintenant naissance à de nouvelles formes d'analyse contrastive qui se trouvent regroupées ici sous trois rubriques: pragmatique contrastive, rhétorique contrastive et linguistique du texte contrastive. La comparaison de deux langues "natives" est ce que l'on entend généralement par l'analyse contrastive, et il existe une somme considérable de travaux contrastifs en didactique des langues.

4. DONNÉES

Le français diffère sensiblement de l'anglais au point de vue de la syntaxe. Certaines catégories grammaticales du français correspondent peu à celles de l'anglais et la plus grande partie des difficultés en acquisition du français L3 par nos apprenants proviennent du fait que ces deux langues ont des structures différentes l'une de l'autre. Dans les lignes suivantes, en commençant par le nom, nous étudierons les sujets les plus problématiques tels que l'adjectif, l'adverbe, le pronom, accompagnés par divers types d'erreurs et fournirons, dans la mesure du possible, des propositions pédagogiques et méthodologiques aux difficultés rencontrées par les étudiants anglophones qui apprennent le français.

4.1. Le Nom

Étant donné que l'anglais ne possède pas d'article qui sert à indiquer le genre et le nombre des noms qu'il actualise, les catégories d'articles apparaissent pour la plupart des apprenants anglophones comme des données, à proprement parler, non raisonnables. En français, le nom est toujours masculin ou féminin alors qu'en anglais cette différence n'existe pas. C'est pourquoi, tout au long de l'apprentissage du français L3, beaucoup d'apprenants ont du mal à saisir les différents emplois des articles qui déterminent le nom. Voici quelques cas de figures: I) Contrairement à l'anglais, les noms de personne ne prennent pas la marque du pluriel en français:

- 1. *Les **Duponts**** ont rendu visite aux **Durands.** → The Duponts visited the Durands. *** → Les Dupont ont rendu visite aux Durand.
- II. En anglais, un nom est généralement complété par un nom précédé d'une préposition qui indique le lieu "The room on the second floor is big.", ce qui n'est pas le cas en français: *La pièce **au** deuxième étage est grande. Pour éviter la construction anglaise, les apprenants peuvent choisir l'une des trois solutions ci-dessous:
- a- une relative: La pièce qui se trouve au deuxième étage est grande.
- b- un nom précédé de la préposition "de": La pièce du deuxième étage est grande.
- c-un participe passé ayant une valeur d'adjectif: La pièce située au deuxième étage est grande.

III. Contrairement à l'usage anglais (*The young who are living under my flat are noisy*.), un nom, en français, ne peut pas être complété par un adverbe de lieu : *Les jeunes **en** bas sont bavards. En français, il vaut mieux compléter le nom, selon le contexte, par une proposition

*** Les énoncés anglais sont écrits en italique.

^{*} L'astérisque à gauche d'une phrase indique qu'elle n'est pas grammaticale.

^{**} Les mots erronés sont écrits en gras.

relative (a), par un adjectif issu d'un participe passé (b) ou par un nom précédé de la préposition "de" (c):

- a- Les jeunes qui sont en bas sont bavards.
- b- Les jeunes installés en bas sont bavards.
- c- Les jeunes du/d'en bas sont bavards.
- IV. *La fille **avec** les cheveux blonds est belle. Ce type d'erreur constaté chez les étudiants anglophones provient du fait que l'anglais complète souvent un nom par un autre nom précédé de la préposition "with", "*The girl with the blonde hair is beautiful*", alors que la construction correspondante qui utiliserait "avec" suivi d'un nom n'est pas correcte en français. On traduit la construction anglaise;

a-souvent par une proposition relative: La fille qui a les cheveux blonds... b-quelquefois par $\grave{a} + article d\acute{e}fini + nom$: La fille aux cheveux blonds...

- V. La proximité entre l'anglais et le français donne lieu quelquefois à des résultats négatifs: certains noms français ressemblant à des noms anglais mais orthographiés différemment, sont très souvent confondus comme le montrent les exemples suivants tirés des copies des apprenants:
- 1.*Par example, Israël tue beaucoup de gens sans reason.
- → Par exemple, Israël tue beaucoup de gens sans raison.
- 2. *Quand je regarde la nature, les arbres, les **montaignes**...
- → Quand je regarde la nature, les arbres, les montagnes...
- 3. *Les femmes ont une plus grande **independence** financière.
- → Les femmes ont une plus grande indépendance financière.

4.2. L'Adjectif

- I. Les apprenants anglophones ont tendance à placer, en français, les adjectifs avant le nom comme ils le font en anglais "*La femme **avec** la **verte** robe venait d'un **étranger** pays", tandis qu'en français, la majorité des adjectifs qualificatifs sont placés après le nom:
- La femme à la robe verte venait d'un pays étranger. → The woman with the green dress came from a foreign country.
- II. En raison de l'inexistence de la notion du genre en anglais (*The girls are intelligent*), les apprenants oublient de faire des accords obligatoires en français: *Les filles sont **intelligent**. \rightarrow Les filles sont intelligentes.

4.2.1. L'Adjectif Possessif

- I. En français, l'adjectif possessif s'accorde en genre et en nombre avec le nom qu'il qualifie, alors qu'en anglais, il s'accorde avec le possesseur et ne prend la marque du genre qu'à la 3^e personne du singulier (his/her): *He sold his house.* / *She sold her house.* Mais on constate dans les copies d'épreuves de nos apprenants des énoncés mal construits: *Mon père a vendu son maison. → Mon père a vendu sa maison.
- II. En français, le genre de l'adjectif ne dépend pas du genre du possesseur mais il dépend du genre du possédé (mon, ma, ton, ta, etc.) alors qu'en anglais, sauf la troisième personne du singulier, il n'existe qu'une seule forme pour chaque personne: my, your, our, their.
- III. Pour indiquer une possession, l'anglais utilise un adjectif possessif (*She broke her leg.*) alors que le français utilise un pronom personnel ou un pronom réfléchi et l'article défini. Dans

ce cas, un tel énoncé "*Elle s'est cassé **sa** jambe." sera incorrect. Pour qu'il soit correct, il faut remplacer l'adjectif possessif "sa" par l'article défini "la": Elle s'est cassé la jambe. Voici un autre exemple:

*Nous lavons nos mains trois fois par jour. \rightarrow We wash our hands three times a day. \rightarrow Nous nous lavons les mains trois fois par jour.

IV. Quand on traduit une attitude, l'anglais utilise l'adjectif possessif et la préposition *with* "She looks me with her mouth open", par contre, le français se sert de l'article défini: Elle me regarde la bouche ouverte. Les apprenants procédant à un transfert négatif de l'anglais écrivent: *Elle me regarde avec la bouche ouverte.

4.2.2. L'Adjectif Indéfini

En raison de la construction phrastique suivante en anglais "I didn't meet anyone at the street", nos étudiants produisent des énoncés fautifs: *Je n'ai **pas** rencontré personne dans la rue. Car, en présence de *personne*, *rien*, *aucune*, *nul*, en français la négation composée *ne...pas* ne s'utilise pas: l'utilisation de *ne* est suffisante. → Je n'ai rencontré personne dans la rue. Lorsque *rien* et *personne* sont sujets, ils doivent être suivis de "ne". La règle ne s'appliquant pas en anglais, les étudiants l'oublient dans la plupart des cas: *Personne est venu. → *Nobody came*. (Personne n'est venu).

4.3. L'Adverbe

- I. En anglais, en dehors du verbe « to be », des temps composés et des formes interrogatives, l'adverbe sépare toujours le sujet de son verbe: I always say the truth. Or, en français, l'adverbe se place toujours après le verbe. Cependant, influencés par l'anglais, les apprenants le placent avant le verbe et donc tout de suite après le sujet: *Je **toujours** dis la vérité. \rightarrow Je dis toujours la vérité.
- II. En français, avec un verbe à un temps composé, l'adverbe se place généralement après l'auxiliaire, entre l'auxiliaire et le participe passé. Du fait qu'en anglais, l'adverbe de quantité se place en général en fin de phrase (*I enjoyed this movie very much*), les apprenants commettent des erreurs comme ci-dessous:
- *J'ai aimé ce film **beaucoup**. → J'ai beaucoup aimé ce film.
- III. Les étudiants confondent tantôt l'adjectif avec l'adverbe et ils écrivent "*Je suis **vite**." en prenant comme modèle l'énoncé "*I'm quick*" alors que la forme correcte serait: "Je suis rapide" ou "Je vais vite". Voici un autre exemple: *Ce repas est **assez**.→*This meal is enough*. (Ce repas est suffisant).

4.4. Les Pronoms

4.4.1. Le Pronom Personnel

I. Certains verbes français sont construits avec la préposition "à" tandis qu'en anglais ils ne prennent aucune préposition: téléphoner à quelqu'un→to telephone someone; obéir à quelqu'un→to obey someone. C'est la raison pour laquelle, lors de la lecture des copies nous avons rencontré des énoncés erronés tels que: *Chaque jour, je téléphone ma mère. → Chaque jour, je téléphone à ma mère.

- II. En français, de nombreux verbes sont suivis d'un complément d'objet direct de chose et d'un complément d'objet direct de personne: Je donne un livre à mon ami. \rightarrow Je lui donne un livre. Par contre, la construction n'est pas la même en anglais: I give my friend a book. \rightarrow I give him a book. De là découlent des énoncés incorrects:
- *J'ai téléphoné **lui** ce matin. \rightarrow *I phoned him this morning*. (Je lui ai téléphoné ce matin).
- III. En anglais, si on emploie le pronom personnel he, she, they+le verbe "to be"+ un nom de profession, de nationalité, de religion, ce dernier nom prend un article indéfini (He is an engineer./She is an architect.) contrairement au français d'où les énoncés fautifs suivants:
- *Il est **un** ingénieur. → Il est ingénieur.
- *Elle est **une** architecte. → Elle est architecte.
- IV. Pour l'expression du temps, le français n'utilise pas comme l'anglais le verbe "être" (*It's fine*) mais l'expression impersonnelle "il fait": Il fait beau. Donc, un tel énoncé "*Il est beau" est agrammatical.

4.4.2. Le Pronom Relatif

- I. Quand les pronoms relatifs *who, that, which* sont objet, on peut les omettre en anglais (Murphy, 2004, p.186) (traduit par nous) "*The movie (that) I saw was interesting.*" tandis qu'en français, cela n'est pas possible : *Le film j'ai vu était intéressant. → Le film que j'ai vu était intéressant.
- II. En français, lorsque le pronom relatif est complément d'un nom précédé par une préposition, on emploie la forme "duquel, de laquelle etc". Dans ce cas, il faut bien faire attention à l'ordre qui n'est pas le même qu'en anglais. S'il s'agit d'un antécédent de personne, on peut utiliser aussi "de qui":

Le médecin sur les conseils duquel (de qui) vous avez acheté ce médicament...

The doctor on whose advice you bought this medicine...

- * Le médecin sur ses conseils vous avez acheté ce médicament...
- III. Avec l'emploi de "dont" l'ordre des mots en anglais et en français n'est pas le même. Après "dont", l'ordre reste en anglais *complément d'objet direct (c.o.d.) +sujet+ verbe* alors qu'en français l'ordre est *sujet+verbe+c.o.d*, d'où les énoncés incorrects suivants:

Here is the friend whose adress I gave you. →*Voici l'ami dont l'adresse je vous ai donné. (Voici l'ami dont je vous ai donné l'adresse).

IV. Quand le pronom relatif marque la possession, l'anglais contrairement au français évite d'utiliser l'article: " *My cousin whose hair is long is very sympathetic.*" Donc, nos étudiants anglophones omettent l'article et écrivent: *Ma cousine dont cheveux sont longs est très sympa." → Ma cousine dont les cheveux sont longs est très sympa.

4.4.3. Le Pronom Possessif

I. Comme la notion du genre n'existe pas en anglais le pronom possessif toujours précédé de l'article défini, posent problème aux étudiants qui oublient, surtout au début de leur apprentissage, de placer l'article défini se rapportant au pronom qui doit s'accorder en genre et en nombre:

I will send my car a week later and you will send yours two weeks later. \rightarrow *Je vendrai ma voiture une semaine plus tard et tu vendras **tien** deux semaines plus tard.

- → Je vendrai ma voiture une semaine plus tard et tu vendras la tienne deux semaines plus tard.
- II. En anglais, une seule forme du pronom possessif existe pour chaque personne: *mine*, *yours*, *his/hers*, *ours*, *theirs*. Par conséquent, les étudiants ressentent des problèmes lors de son usage en français.

5. CONCLUSION ET PROPOSITIONS

Cette étude, dont l'objectif est d'analyser comparativement les erreurs de transfert négatif entre l'anglais (L2) et le français (L3), nous permet de conclure que:

- -L'utilisation de certaines catégories grammaticales telles que le nom, l'adjectif (possessif, indéfini), l'adverbe, le pronom (personnel, relatif, possessif) se différencie dans les deux langues et pose aux apprenants des problèmes lors de l'acquisition du français L3. Donc, ces divergences doivent être prises en compte par les enseignants et expliquées d'une manière claire et logique pour que les apprenants puissent saisir le fonctionnement des deux langues en question et qu'ils commettent moins d'erreurs. Certains phénomènes linguistiques présentés par l'enseignant dans un corpus bien défini en partant des erreurs relevées ou des structures nouvelles contribueraient aux apprenants à découvrir le fonctionnement de la langue et du corpus proposé ainsi qu'à transformer des apprentissages langagiers en véritables acquisitions.
- -Dans l'apprentissage institutionnel d'une langue étrangère, l'influence de la langue maternelle ou celui de la première langue étrangère sur la deuxième langue ne constituent pas la seule source de transfert. La méthode d'enseignement, les conditions d'apprentissage et la pédagogie adaptée peuvent provoquer également des transferts positifs ou négatifs.
- -En plus des divergences, il existe bien sûr dans les deux langues des sujets représentant des convergences qui facilitent l'enseignement/apprentissage: le passif, la transformation des pronoms personnels et des temps verbaux au discours indirect, la présence des mots synonymes dans les deux langues, etc. Ceci pourrait constituer le sujet de recherches à effectuer dans ce domaine.
- La nécessité de réaliser d'autres études qui auraient pour but de comparer ces deux langues selon les caractéristiques phoniques/graphiques, morphologiques et lexicologiques s'impose. Le fonctionnement des systèmes verbaux des deux langues mérite d'être analysé plus profondément.
- Enfin, nous pensons que la formation des enseignants bilingues même plurilingues porte une grande importance pour pouvoir répondre aux besoins des départements ayant dans leurs programmes des cours de deuxième langue étrangère, aux besoins des apprenants qui apprennent une seconde langue étrangère comme le sont les individus de cette étude et comme le sont la très grande majorité des apprenants faisant des études dans les départements de Français des facultés de pédagogie en Turquie.

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