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Evaluation of Educational Outputs in Cognitive and Affective Domains

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ABSTRACT

The purpose of this study was to evaluate teacher and student performance in cognitive and affective domains. A total of 409 teachers and 824 eighth grades participated in this study. The scale used in this research was composed of a total of 50 behaviors, 20 belonging to the cognitive and 30 to the affective domain. Results revealed that the teachers did not exhibit the cognitive and affective behaviors in the learning-teaching process at desired levels. Another result was that 62% of the cognitive acquisitions were determined by the affective behaviors. This result indicates that a great majority of the behaviors that the students exhibited in the learning-teaching process appeared in accordance with the mutual dependency relationship of the cognitive and affective domains. In the light of these judgments, the present study suggests that the learning-teaching process should be arranged in a way that will meet students' expectations in order to increase the performance levels of the teachers

Key Words: Education, educational outputs, evaluation, cognitive domain, affective domain.

Bilişsel ve Duyuşsal Alanlarda Eğitsel Çıktıların Değerlendirilmesi

ÖZET

Bu araştırmanın amacı bilişsel ve duyuşsal alanlarda öğretmen ve öğrencilerin performanslarını değerlendirmektir. Araştırmaya 409 öğretmen ile 824 sekizinci sınıf öğrencisi dahil edilmiştir. Araştırmada kullanılan ölçek, 20'si bilişsel alana-, 30'u da duyuşsal alan ile ilgili olmak üzere toplam 50 davranıştan oluşmaktadır. Yapılan geçerlik ve güvenirlik çalışması sonucunda ölçeğin yeterli geçerlik ve güvenirliğe sahip olduğu görülmüştür. Araştırma sonucuna göre öğretmenlerin öğrenme-öğretme sürecinde bilişsel ve duyuşsal davranışları istenilen düzeylerde göstermedikleri belirlenmiştir. Araştırmanın diğer bir sonucu ise, bilişsel kazanımların % 62'sinin duyuşsal davranışlar tarafından belirlendiğinin ortaya çıkmasıdır. Bu sonuç öğrencilerin öğrenme-öğretme sürecinde gösterdikleri davranışlarının büyük bölümünün bilişsel ve duyuşsal alanların karşılıklı bağımlılık ilişkisine göre ortaya çıktığı şeklinde değerlendirilebilir. Bu yargılardan hareketle öğrenme-öğretme sürecinin öğrencilerin beklentilerini karşılayacak biçimde düzenlendiğinde öğretmenlerin performanslarının artabileceği söylenebilir

Anahtar Sözcükler: Eğitim, eğitimsel çıktılar, değerlendirme, bilişsel alan, duyuşsal alan.

INTRODUCTION

Every teaching program includes an appraisal system putting forward student and teacher performance in order to determine the realization level of objectives (Tyler, 1949). The *Appraisal system* can be described as a transformational system providing information about teaching and learning outcomes and helping in the decision-making process and in deciding about future plans (Ovando, 1994).

In the determination of the realization level of the objectives in a teaching program, different appraisal approaches and methods can be mentioned. Until recently, the determination of the realization level of program objectives, in other words the evaluation of learning outputs, has been made according to traditional educational understanding (Mcllveen, Grenan and Humphreys, 1997). However, towards the end of the twentieth century, learning, achievement and achievement appraisal (Halawi, McCarty and Pires, 2009), along with learning outcome and the inclusion of the learning process in evaluation gained importance and alternative evaluation methods such as performance appraisal, project, portfolio, rubric, self and peer evaluation have come into prominence (Anderson, 1998; Anderson and

Krathwohl, 2001; Birgin and Gürbüz, 2008; Dochy, 2001; Doğan, 2009; Sherpard, 2000; Yücel, 1999).

This study can be accepted as important because it reveals student acquisitions and teacher performance levels in the achievement of these acquisitions in the teaching process.

An attempt has been made to put forth the evaluation of educational outputs in traditional education approaches generally through the rate of graduates and test results (Grygoryev and Karapetroviç, 2005). In contemporary education approaches, on the other hand, the evaluation of educational outputs is in the form of the evaluation of acquisitions with respect to the student's special skills and proficiencies rather than that of making judgments on the student's exam grades (Stiggins, 1987), and in the evaluation of educational outputs, a variety of evaluation methods and tools such as inspector evaluation, student and parent opinions, systematic observation of teachers, administrator reports, teacher tests, and colleague examination can be used (MNE, 2000).

In the evaluation of educational outputs, student evaluation is of great importance because it provides holistic information about those becoming involved in education service. Information provided by students can be accepted as one of the best pieces of feedback in order to develop educational methods and strategies (Abramowitz, 2007). Since students observe many teachers together, they become better acquainted with their teachers (MNE, 2000). According to Peterson (1995), useful, reliable and important pieces of information about teacher performance can be learned through student reports. For example, this method can provide pieces of information about equity in the classroom, the criterion of communication between student and teacher, learning possibilities in the classroom, development of motivation in the classroom, effects on students, guidance and motivation levels, and also homework assignments, tests and course books.

It is observed that an educational program based on the constructivist approach was launched at primary schools in Turkey in the 2004 educational year (Güven, 2008). In the assessment-evaluation dimension of this new program, in addition to classical assessment-evaluation methods, such methods as demonstration, anecdote, interview, observation, verbal presentation, projects, study sheets, self-evaluation, student portfolio, performance appraisal, grading scales, attitude scales, concept maps, structured grid, diagnostic branched tree, word association, written reports, posters, group and peer evaluations, and family observation

forms have begun to be used in the assessment process through exemplification. Besides these, it can be stated that through such methods as self-evaluation, group evaluation and family observation forms, it was aimed that students and their parents should participate in the evaluation process as well (Acat and Demir, 2007; Ayten, 2006; Gömleksiz and Bulut, 2007).

Although the program based on the constructivist approach has been in effect for about 7 years, when educational outputs are examined in Turkey, it is observed that there are still serious problems with respect to the effectiveness of the education and teaching process (Demirdelen and Yapıcı, 2007; Erdoğan, 2005; Ercan and Altun, 2005; Gözütok, Akgün and Karacaoğlu, 2005; Güven and Eskitürk 2007; Yaşar, Gültekin, Türkan, Yıldız and Girmen 2005). The exams held at national level and the results obtained from PISA, TIMMS and PIRLS held internationally can be evaluated as one of the most important pieces of evidence putting forward the problems related to this matter. That Turkish students ranked lowest among the OECD countries at 2003, 2006, 2009 PISA and 1999, 2007 TIMSS examinations (MNE, 2010; Uzun, Bütüner and Yiğit, 2010; Karip, 2007) and thousands of others (in 2009 about 11.000) could not answer any of the questions and scored "zero" in the exams organized to place students in higher education and to determine pupils' proficiency levels in elementary education can be given as examples for this situation (Tekışık, 2009).

National and international exam results show that academic achievement levels of students at school in Turkey are not at desired level. Well how can students' academic achievements be increased to top level? How can necessary interest and motivation be created in them to achieve this? This study was prepared with the aim of revealing students' and teachers' performance levels in the cognitive and affective domains in the teaching process. To achieve this aim, answers were sought to the questions of "What do teachers servicing at the state elementary schools in the province of Tokat and eighth grade students attending these schools think about cognitive and affective behaviors they exhibit in the learning-teaching process?"

Theoretical Framework

Cognitive and Affective Objectives in Education Programs

Taxonomy of educational objectives can be evaluated as a structure specifying expectations from students in the process of determining the realization level of a program. This structure aims to classify students' learning outputs and achieving togetherness by assessing their achievements with the same assessment tool (Krathwohl, 2002). Bloom and his colleagues

can be accepted as the first pioneers of evaluation of learning outputs through the taxonomy of detailed educational objectives (Bolin, Khramtsova and Saarnio, 2005).

Benjamin S. Bloom and his colleagues studied learning domains known as Bloom's taxonomy in order to develop standardized tests and compare students' achievements. In order to appraise student performance, the authors classified the educational objectives in the domains in the developed taxonomy as cognitive, affective and psychomotor (Hanna, 2007)

Of these three domains put forward by Bloom and Krathwohl (1956), the cognitive domain has aroused most interest because of its easier applicability in primary and secondary education. Bloom et al specified the cognitive domain at six levels and as a hierarchical structure, namely *knowledge* including memorization, recall and recognition; *comprehension* focusing organization of ideas, transformation and interpretation of information*; application* based on characteristics, rules, principles and problem-solving*; analysis* focusing on organization, division of parts; *synthesis* based on the creation of a verbal or physical thing and combination of new things*;* and *evaluation* focusing on making judgments about differences and similarities (Athanassiou, McNett and Harvey, 2003). (Figure 1).

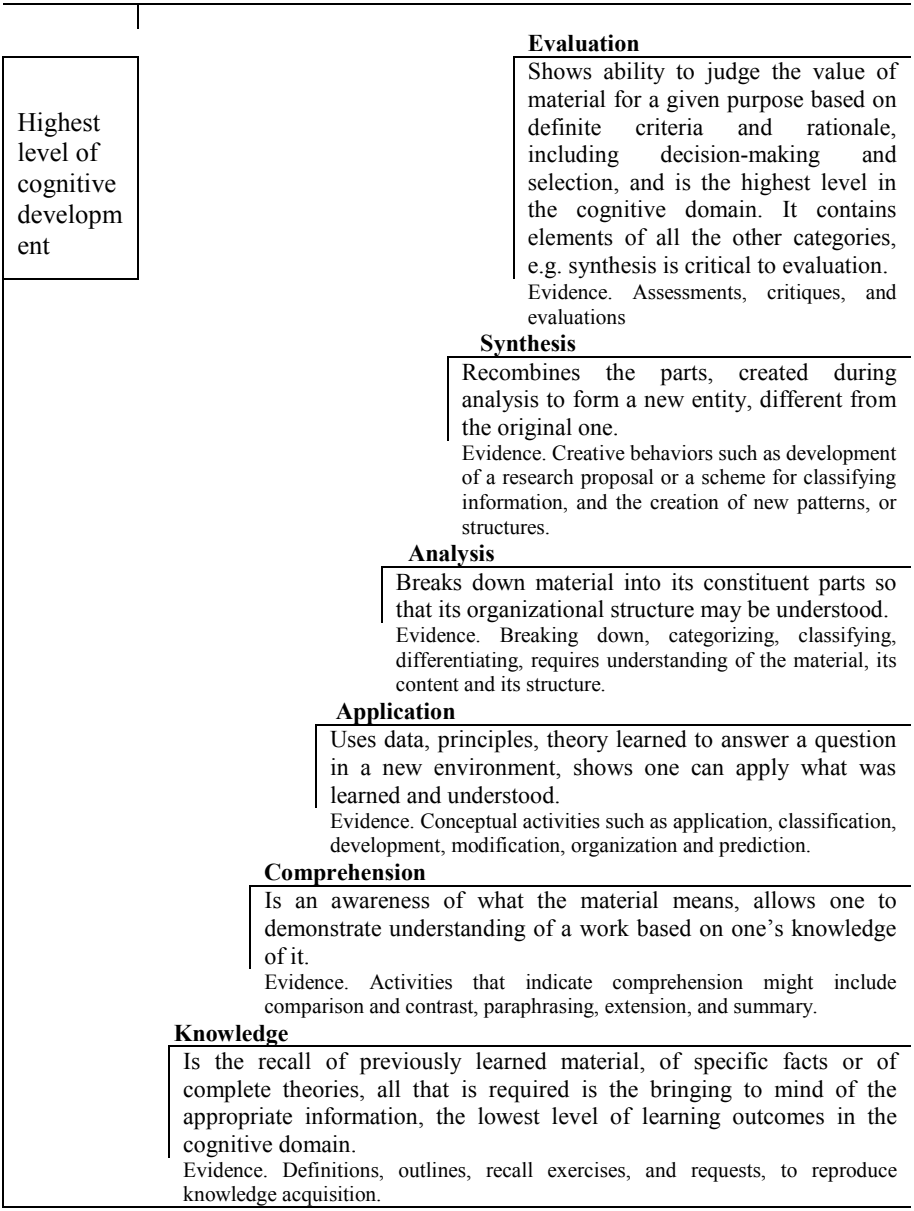

Figure 1: Bloom's Taxonomy of Educational Objectives: Cognitive Domain (Athanassiou, McNett and Harvey, 2003)

Bloom et al defined the levels of affective domain as interest, attitude and development of the sense of value and appreciation and changes in the ability to make judgments (Bacanlı, 2006; Hanna, 2007; Senemoglu, 2007).

According to Krathwoll, Bloom and Masia (1964), the affective domain shows a hierarchical structure including such sub-domains as:

1. Receiving: Showing continuity; awareness, willingness to hear and selected attention,
2. Responding: being compliant in responding, willingness to respond and satisfaction in responding,
3. Valuing: Acceptance of a value, preferring a value and complying to it, and commitment to a value,
4. Organization: integrating a new value into a former one and creating a value system,
5. Characterization: Converting a value into a behavior criterion and internalizing it.

The inter-relationships of the constructs in the cognitive domain taxonomy can be shown as follows (Figure 2).

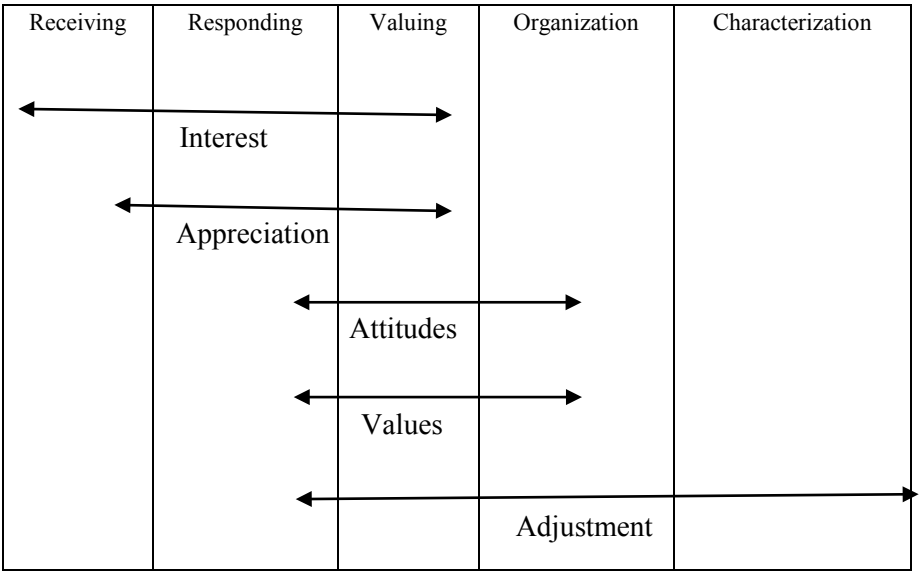

Figure 2: Range of Constructs in Krathwohl et al.'s Taxonomy Continuum (R.M. Bohlin, 1998).

Evaluation of Cognitive Acquisitions

It can be stated that information and skills which students are expected to acquire in a teaching program vary over a very large range. This means that teachers should use evaluation tools in accordance with the characteristics of the relevant field of interest. Otherwise, the use of tools that do not sufficiently cover the subject area, the evaluation of characteristics irrelevant to the objectives of a course and not providing any ideas about desired learning outputs will mean that students do not acquire the desired behaviors, and there will also be a risk that the ones acquired may be insufficient or incorrect (Bloom, 1956). Being more than a tool that provides an evaluation of acquisitions in the classroom, Bloom's taxonomy can be evaluated as a tool for reinforcing upper level thinking.

Because Bloom's taxonomy has a stage-wise and hierarchical structure, cognitive input behaviors are evaluated as necessary prerequisite pieces of learning in the realization of objectives included in education programs. Prerequisite pieces of learning make it possible to perform learning more easily and in an integrative manner. Thus, on condition of starting with introductory behaviors and based on the structure formed by Bloom's taxonomy, the evaluation of learning outputs can be realized easily and according to a given aim (Fidan, 1985; Lord and Baviskar, 2007). In the evaluation of cognitive acquisitions, written examinations, multiple-choice tests, tests with short answers and true-false tests, study sheets, project work, verbal presentations and laboratory applications can be mentioned among tools and methods (Doğan, 2009).

Evaluation of Affective Acquisitions

It can be stated that the evaluation of affective behaviors is much more difficult compared to that of cognitive behaviors. However, in the evaluation of affective behaviors, many of the methods and tools used in the evaluation of cognitive acquisitions can be used. Individual questionnaires, performance questionnaires, subjective test questions, evaluation scales, objective tests, checklists, interview sheets, open-ended questions, student reports and term papers, close-ended question lists, the affective meaning technique, and projective techniques are some of these (Bacanlı, 2006).

With individual questionnaires, students can be asked for their attitudes and preferences with respect to specific thoughts and activities. Performance questionnaires can contribute, even if little, to getting to know about students' values. While term papers reveal a child's responses to a given subject, student reports are important in terms of discovering students' motivation and interest. The Evaluation scale is useful in finding out a

student's positive or negative response to a given subject. Subjective test questions provide students with the opportunity to reveal their judgments about important matters and show their values regarding a given subject. *Objective tests* can be used in reaching results that cannot be reached through subjective tests and in removing weak aspects of subjective tests. Finally, *checklists* can be regarded as very useful tools included among objective and subjective questions (Eiss and Harbeck, 1969).

METHOD

The study is designed in a survey model. A total of 409 teachers and 824 eight grades students participated in this study.

According to the personal data belonging to the participant teachers and students, of 409 teachers, 211 were females and 198 were males. Moreover, of the students, 392 were girls and 432 were boys. While 61% of the teachers were classroom teachers, 39% were branch teachers. As for the length of service, while 21.3% of the teachers had 1-5 years of teaching experience, 21.3% had 6-10 years, 46% had 11-20 years, while the percentage of those having teaching experience of 21 years and over was 13.4%. With respect to their graduation status, 28% of the teachers stated having graduated from a two-year education institute, 7.8% from a three-year education institute and the remaining 64.1% from a four-year undergraduate program. It was observed that 8% of the students' fathers were teachers, 21.1% were civil servants, 32. 3% were workers and 39.4% were self-employed people. 25.7% of the students stated having graduated with an "Excellent" degree, 43.1% with a "Good" degree, and 31.2% with an "Average" degree on their report cards. 41.3% of the teachers at the state schools had teaching experience of 10 years or below. 24.2% of the students stated having come to their present classes with an "excellent" degree, 43.3% with a "good" degree and 32.5% with an "average" degree.

Data Collection Inventory

The scale used in the study is composed of 50 behaviors belonging to the cognitive and the affective domains. The prepared scale was administered to the teachers and the students after making necessary adaptation. To determine the students' and the teachers' opinions about the performances of the teachers and the students, a five-point grading was used, namely "All the time" (scores ranging between 4.20 and 5.00), "Most of the time" (scores ranging between 3.40 and 4.19), "From time to time" (scores between 2.60-3.39), "Very rarely" (scores ranging between 1.80 and 2.59), and "Never" (scores ranging between 1 and 1.79).

By taking into consideration the fact that the participants were the eighth graders and the teachers, the cognitive domain behaviors in the scale were limited to the steps of knowledge, comprehension and application, and the affective domain behaviors to the steps of receiving, responding and valuing. For the validity and reliability study, the scale was applied to 171 eighth grade students studying in elementary schools in the provinces of Tokat 117 teachers employed at these schools. Factor analysis was performed to determine the construct validity of the questionnaire,

The suitability of the scale's pilot study data for factor analysis was tested with Barlett's sphericity test and Kaiser-Meyer-Olkin (KMO) sampling proficiency test. According to Barlett's sphericity tests, it was observed that the data was suitable for multi-variate normal distribution. The KMO value of the scale administered to the students was calculated as .960 χ^2=1,780E4, The KMO value of the scale administered to the teachers was calculated as .976; χ^2=3,627E4. In order to determine the definite number of factors in both scales, the Varimax Rotation Technique was used. After rotation, a structure with 2 factors was determined in both scales. 20 questions in the first factor in the scale belong to the cognitive domain and 30 questions in the second factor belong to the affective domain. In the administration with the students, the percent of variance explained by the first factor is 44.289% and that by the second factor is 6.921%. Moreover, two factors together variance explanation percentage is 51.210%. However, in the administration with the teachers, the percent of variance explained by the first factor is 48.536% and that by the second factor is 6.065%. Moreover, two factors together variance explanation percentage is 53.601%. In the scale administered to the students, it was observed that the loading values varied between 0.566-0.721. In the scale administered to the teachers, it was observed that the loading values varied between 0.412-0.716. Based on this data, it can be accepted that the scales have two factors. In the reliability study made to determine the internal consistency of the scale, the Cronbach-α coefficient of the scale administered to the students was calculated as 0.932; and that of the scale administered to the teachers was found to be 0.961. Based on this data, it can be stated that the scales have high reliability in terms of internal consistency.

Data Analysis

Based on this data, it can be stated that the scale has high reliability in terms of internal consistency. The arithmetic means of the opinions and correlations between the opinions were calculated and the difference between the opinions was tested with t-test and regression analysis.

FINDINGS

While the participant students stated that their teachers exhibited 10 of the cognitive behaviors "From time to time" and the other 10 "Most of the time", they stated that their teachers exhibited 16 of the affective behaviors "From time to time" and the other 14 "Most of the time". On the contrary, the teachers stated that they exhibited 4 of the cognitive behaviors "Most of the time" and the remaining 16 behaviors "All the time", and all of the affective behaviors "All the time". The students stated that they exhibited 4 of the affective behaviors "All the time" and the others "Most of the time", and 11 of the affective behaviors "Most of the time'' and the remaining 19 behaviors "All the time".

From the students' opinions (scores ranging between 3.40 and 4.19), it can be understood that, in the cognitive domain, the teachers most frequently performed the activities of telling, writing, listing what is learned, remembering a previously learned piece of information when seeing, making associations between acquired pieces of information and explaining about these associations, verbal and written summarizing of what is learned, expressing what is learned with figures and symbols, predicting the result of a problem based on what is learned, and allocating enough time every day for lessons and solving appropriate examples by using learned methods. According to the students, the teachers performed the other cognitive activities "from time to time". However, the teachers stated that they performed the behaviors of grouping, classifying an acquired piece of information, making associations between acquired pieces of information and explaining about these associations, paraphrasing what is learned, determining what is incorrect and missing and distinguishing from what is correct and selecting methods which are likely to make students more successful "Most of the time" and the others "All the time" (Table 1).

Table 1. Teacher and Student Behaviors in Relation to Cognitive Domain

Statements	Student		Teacher	
	$\overline{X}$	SS	$\overline{X}$	SS
Telling, writing, listing what is said	3,63	,90	4,27	,73
Defining a possession, an object or a concept by using what is learned	3,36	1,13	4,41	,71
Grouping, classifying acquired information	3,21	,79	4,19	,73
Selecting an acquired piece of information from among wrong ones	3,39	,98	4,24	,74
Upon seeing, remembering a piece of information learned before	3,43	,99	4,31	,72
Establishing relationships between acquired pieces of information and explaining them	3,43	1,09	4,06	,78
Summarizing what is learned verbally and in writing	3,48	1,02	4,30	,74
Expressing what is learned with figures and symbols	3,52	1,01	4,23	,71
Answering questions asked in lessons by using previous learning	3,33	1,05	4,27	,71
Explaining what is learned by using one's own sentences	3,28	1,02	4,19	,71
Determining what is wrong and missing, discriminating from right ones	3,05	,92	4,04	,77
Solving a problem through formulas	3,25	1,10	4,49	,66
Based on what is learned, predicting the result of a problem	3,43	1,05	4,77	,44
Choosing tools which are appropriate for lessons	3,39	1,06	4,28	,75
Choosing methods to make students more successful	3,48	1,04	4,09	,76
Before lessons, doing activities appropriate for examples in the workbook	3,08	,98	4,40	,74
By allocating enough time for lessons every day, solving appropriate examples by using methods learned	3,47	1,14	4,35	,70
Writing what is learned in reports	3,26	1,11	4,35	,73
By using words given in relation to a subject, forming a new text or by using numbers given, writing a problem statement	3,37	1,12	4,36	,69
Forming tables by using numbers, data	3,29	1,19	4,32	,66

From the students' opinions (scores between 2.60-3.39), it can be understood that, in the affective domain, the teachers "from time to time" exhibited the behaviors of behaving cordially toward students, getting students to feel happy in the classroom, protecting students against dangers, considering students important, paying attention to students' problems, being patient toward students, being honest toward students, taking students' desires into consideration, being open to criticisms, behaving tolerantly toward students, teaching lessons enthusiastically, becoming influenced by students' behaviors (becoming annoyed, feeling sad, happy, etc.), appreciating beauty, goodness, uprightness, cleanliness, honesty,

benevolence, tolerance, and kindness and telling the difference between good and bad, right and wrong, just and unjust. Besides this, according to the students, the teachers exhibited the other behaviors "most of the time". However, the teachers stated that they exhibited all the behaviors in the affective domain "all the time" (scores ranging between 4.20 and 5.00) (Table 2).

Table 2. Teacher and Student Behaviors in Relation to Affective Domain

Statement	Student		Teacher	
	$\overline{X}$	SS	$\overline{X}$	SS
Behaving sincerely toward students	3,39	1,10	4,45	,64
Behaving respectfully toward students	3,49	1,18	4,55	,66
Trusting students	3,59	1,14	4,48	,61
Rewarding students' achievements	3,74	1,15	4,32	,68
Encouraging students to express what they feel and think clearly	3,46	1,12	4,34	,64
Achieving students' feeling of happiness in the classroom	3,32	1,06	4,29	,63
Turning the classroom into an amusing environment	3,35	1,13	4,35	,68
Protecting students against dangers	3,38	1,19	4,33	,68
Paying attention to students	3,34	1,18	4,33	,71
Showing interest in students' problems	3,35	1,08	4,34	,70
Showing patience to students	3,17	1,24	4,37	,67
Helping students when they need	3,46	1,15	4,43	,68
Being honest toward students	3,30	1,16	4,54	,65
Letting students ask questions when they do not understand	3,40	1,14	4,41	,71
Accepting students' lacks and wrongdoings	3,42	1,08	4,50	,66
Preventing students from giving harm to classroom objects	3,41	1,24	4,43	,70
Supporting students to become successful	3,41	1,03	4,53	,64
Calling students with their names	3,44	1,06	4,51	,65
Starting and finishing lessons on time	3,45	1,04	4,26	,75
Giving students acceptable punishments	3,79	1,08	3,23	,71
Taking students' desires into consideration	3,30	1,01	4,56	,65
Entering lessons by making plans and getting prepared beforehand	3,40	1,00	4,28	,68
Open to criticisms	3,38	1,09	4,55	,64
Checking if classroom rules are obeyed	3,41	1,01	4,42	,67
Behaving toward students equally	3,46	1,01	4,36	,67
Behaving toward students tolerantly	3,34	1,00	4,40	,66
Teaching lessons enthusiastically	3,39	1,03	4,31	,63
Being affected by students' behaviors (getting angry, sad, happy, etc.)	3,24	1,04	4,28	,76
Appreciating beauty, goodness, honesty, cleanliness, helpfulness, tolerance, politeness	3,39	1,09	4,53	,63
Discriminating between good and bad, right and wrong, correct and incorrect	3,39	1,13	4,41	,66

However, following the examination of the level of cognitive and affective behaviors that the students exhibited, of cognitive behaviors,

students were observed to exhibit those of "selecting an acquired piece of information from among incorrect ones, determining what is wrong and missing and distinguishing from what is correct, writing what is learned in reports, composing a new text about a topic by using given words and writing a problem statement by using given numbers "all the time". Moreover, they exhibited the other behaviors of the cognitive domain "most of the time" (Table 3).

Table 3: Students' Opinions About Their Own Behaviors Belonging to Cognitive Domain

Statements	$\overline{X}$	SS
I can tell, write and list what I learn	3.86	.89
I can easily define a thing, an object or a concept by using what I learn	3.97	,91
I can group and classify a piece of information that I acquire	4,10	,89
I can select a piece of information from among incorrect ones	4,28	,87
When I see one, I can remember a piece of information that I have previously learned	4,03	,92
I can make associations between acquired pieces of information and I can explain about these associations	4,00	,92
I can summarize what I learn both verbally and in written form	3,92	,92
I can express what I learn with figures and symbols	3,86	,94
I can answer questions asked in the lesson with what I have previously learned	4,16	,86
I can paraphrase what I learn	4,19	,85
I can determine my mistakes and imperfections, and distinguish from what is correct	4,25	,84
I can solve a problem through formulas	3,87	,99
Based on what I have learned, I can predict the result of a problem	4,03	,95
I can select tools appropriate for lessons	4,11	,91
I study my lessons by selecting methods that are likely to make me more successful	3,96	,97
Before the lesson, I perform activities appropriate for examples in the workbook	4,03	,91
I allocate enough time every day for my lessons and solve appropriate examples by using learned methods	3,95	,90
I can write what I learn in reports	4,25	,87
I can compose a new text about a topic by using given words or write a problem statement by using given numbers	4,20	,86
Based on data, I can create charts	3,72	1,02

In the affective domain, the students stated that they behaved cordially toward their teachers and friends, behaved respectfully toward their teachers and friends, felt safe in their classes, considered their classmates important, helped their classmates when necessary, behaved honestly toward their classmates, knew and accepted imperfections, protected things in their

classrooms, spent effort to become successful in their classes, did not give their friends nicknames; did not call them by names they did not like, started their lessons on time, put their lessons first, obeyed classroom rules, considered themselves important, behaved tolerantly toward their classmates, came to their classes willingly, appreciated one of their friends when he/she did something good, told the difference between good and bad, right and wrong, just and unjust "all the time" and they performed the others "most of the time" (Table 4).

Table 4: Students' Opinions about Their Own Behaviors Related to Affective Domain

Statements	$\overline{X}$	SS
I behave cordially toward my teachers and friends	4,38	,82
I behave respectfully toward my teachers and friends	4,58	,66
I feel safe in my classroom	4,22	,99
My teacher's saying "Well done" when I become successful in my lessons or exhibit a good behavior makes me happy	4.14	.92
I can express my feelings and opinions without hesitation in my class	3,85	1,06
I'm happy to be in my class	4,13	1,07
My classroom is an amusing place	4,13	1,04
I protect my classmates against dangers	4,06	1,00
I consider my classmates important	4,41	,87
I pay attention to my classmates' problems	4,09	,94
I treat my friends equally in the classroom	4,18	,92
When necessary, I help my classmates	4,45	,82
I behave honestly toward my classmates	4,48	,76
I openly ask my friends and teachers what I'm curious about	4,12	,94
I know and accept my imperfections	4,31	,84
I protect things in the classroom	4,38	,85
I spend effort to become successful in my class	4,46	,78
I do not give my friends nicknames; I do not call my friends names they do not like	4,75	,65
I enter my lessons on time	4,51	,74
I want those giving harm to me to be punished	4,13	1,10
I expect my teachers and friends to take my suggestions into consideration	4,11	,90
For me, my lessons come first	4,33	,88
I am open to criticisms by my friends	4,06	1,03
I obey classroom rules	4,46	,78
I consider myself important	4,51	,83
I behave tolerantly toward my friends	4,42	,83
I come to class willingly	4,36	,96
My friends' sadness and happiness affect me	3,66	1,23
When one of my friends does something good, I appreciate him/her	4,30	,90
I can tell the difference between good and bad, right and wrong, just and unjust	4,59	,78

According to these results, it can be stated that the students' acquisitions related to the affective domain were at higher level compared to those of the cognitive domain. According to the analysis results, a high level positive relationship was established between the cognitive behaviors and the affective behaviors ($r = 0.790$, $p \leq .001$). A student's cognitive domain score (Y) was predicted by using the following predictive equation. According to this, Cognitive Domain= 20.166+1.241 (Affective Domain). According to the regression analysis results, it can be stated that affective behaviors are significant predictors of cognitive behaviors ($R=0.790$, $R^2=0.62$, $F=2041.490$, $p \leq .001$). Moreover, following regression analysis, it was observed that there was a significant difference between the participant teachers' opinions and the students' opinions at $p \leq .001$ level. According to the analysis results, it was determined that 62% of the total variance relating to the cognitive behaviors belonged to the affective behaviors (Figure 2).

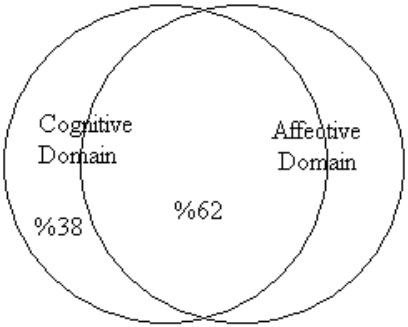

Figure 3. Joint Variance of Cognitive Domain and Affective Domain Behaviors

DISCUSSION AND CONCLUSION

As understood from the results of the study, nearly half of the teachers were young people. Thus, it can be stated that at the schools where the study was carried out there is a group of teachers who are dynamic. On the other hand, the fact that only a quarter of the students had come to their present class with an "Excellent" degree can be evaluated as the fact that a great majority of the students had moved up without having reached a sufficient level of readiness. In the study, the fact that the students stated that their teachers had not exhibited the cognitive and affective behaviors "All the time" is meaningful. However, the students stated that they themselves

exhibited most of the cognitive and affective behaviors. This might mean that students reinforce their learning through such additional resources as parents, private lessons or private courses other than teachers at school.

When evaluated from the perspective of cognitive acquisitions, it is a well-known fact that while arranging activities with the aim of facilitating learning the teacher's asking questions, making statements, making consolidations, giving feedback, making corrections, motivating, doing exercises, keeping students' attention alive, providing clues, achieving fluency in lessons (Açıkgöz, 1996), organizing and presenting knowledge and skills well, selecting appropriate teaching methods, spending effort for the subject to be learned well, and giving place to students' opinions about a matter, increase students' performance as well as the quality of education does (Alkan, 2005; Tan, 1989; Yanpar, 2005). Results also demonstrate the fact that the teachers' behaviors belonging to the cognitive domain are not considered sufficient by the students, which is proved by the teachers' stating that they did not exhibit all of these behaviors "All the time". However, the fact that the cognitive behaviors are not performed "All the time" may lead to students' becoming unsuccessful by affecting their performance negatively. The fact that 25.7% of the students moved up with an "excellent" degree seems to be important in terms of revealing the problem.

Following the examination of results of some studies in order to make a comparison with those obtained from this study, it was observed that Kuran (2003), in the study made with 510 classroom teachers and 59 elementary school supervisors serving in the province of Hatay, found that the supervisors determined that the teachers were not proficient enough in the matters of "using voice tones", "using the board effectively", "exhibiting democratic attitudes toward all students", "being able to show through behaviors in the classroom that they are eager to teach", "being able to use teaching aids", "being able to prepare material appropriate for the subject", "being able to give students feedback as soon as possible", "being able to use different methods during the lesson" and "being able to activate students' background knowledge about the subject".

In another study, Öztürk (2001) found that 914 primary school teachers serving in the central districts of Ankara exhibited behaviors with respect to entering classes at "moderate" level. Again, in a study by Örenel (2005) with 515 students at 14 schools located in the Anatolian part of the province of Istanbul, the students were found to state that 31% of the teachers started and finished lessons on time, 38.8% taught lessons in

accordance with students' levels, and half of them made lessons enjoyable. Moving from the result that the teachers stated that they exhibited behaviors with respect to entering classes and using methods and aids "From time to time", it can be stated that the results obtained from the present study share similarities with those of the above-mentioned studies.

The above-mentioned studies also indicate that students expect their teachers to spend more effort about cognitive acquisitions. It is meaningful that although studies on this matter were made in different regions, they yielded similar results. That the results of this study overlap those of previous studies might mean that the problem has been continuing at national level. For this reason, that students' expectations cannot be met at school at desired level might have led them to try to benefit from private courses or additional resources.

When looking at the affective domain behaviors that the teachers exhibited, the students were observed to state that the teachers exhibited half of these behaviors "from time to time". From the results of this study, it can be concluded that the students thought that their teachers were not proficient enough with respect to such teacher qualities as being cordial, honest, patient and tolerant toward students, attaching importance and paying attention to them, showing interest in their problems and behaving justly toward them. However, Baker (2003) states that a warm, honest and non-conflicting student-teacher relationship does not necessarily contribute to students' adapting to school or participating in positive school activities, but that the relationship based on trust between the student and the teacher has a determining effect on students' adapting to school order, academic achievement, learning motivation and academic performance.

In a study made by Kaya (2008) with 20 administrators and 190 classroom teachers serving at elementary schools in the central district of Uskudar in the province of Istanbul and 287 4th and 5th grade pupils studying at those schools in the 2007-2008 educational year, the students stated that their teachers let them behave as freely as possible, gave them the feeling of speaking freely, and evaluated their work objectively from time to time. Furthermore, Eyicil (2011), in a study made with 306 teachers servicing at secondary schools in the provincial center of Kahramanmaraş and 1468 students studying at those schools, found out that 41.8% of the students stated that their teachers provided a comfortable atmosphere in the classroom for asking questions, 49.5% stated that they could easily express themselves in terms of communication, and 56.7% stated that 91.5% of their

teachers encouraged them to behave comfortably when communicating with them outside lessons.

On the other hand, in the study made by Örenel (2005) with 515 students at 14 schools located in the Anatolian part of the province of Istanbul, it was found that more than half of the students stated that their teachers gave them the right to speak equally; when they stepped out of line their teachers reflected those into their marks; their teachers treated all the students equally; nearly all of the teachers were perceived by the students as honest; stated that what their teachers did and said were not in contradiction with one another; half of them stated that their teachers responded to criticisms with respect and tolerance; they could easily express themselves when they did not agree with their teachers; stated that their teachers appreciated their thoughts; half of them stated that their teachers appreciated their feelings; more than half of the students stated that their teachers were against violence and 27.8% stated that their teachers behaved sincerely and cordially toward them.

It is also understood from studies that students do not feel very uncomfortable in their communication with their teachers and their behaviors. However, students expect their teachers to behave more respectfully, be more open to communication, value their thoughts more, provide them with a more comfortable learning environment and behave more cordially and sincerely toward them. It was revealed with this study that students expect their teachers to exhibit a high level of behaviors about this matter.

Another result having appeared with the study was that the inter-dependency of cognitive behaviors and affective behaviors was revealed. According to the research results, acquisitions are determined by the affective behaviors. In other words, more than half of the teachers' and the students' academic performances are determined by their affective behaviors. This can be evaluated as an indication of the fact that students' expectations from teachers play a very important role in the realization of cognitive behaviors.

Research studies also reveal that although the new program prepared by the Ministry of Education according to the "Constructivist" educational understanding has been in practice for about six years, the results of studies made recently and those of studies made before it generally overlap. In other words, since necessary attention has not been paid to the priorities that the new program has brought, problems with respect to the implementation of the new program continue to exist.

As Bloom's taxonomy deals with every domain in a distinctive way, it can be stated that it is a learning and evaluation model approved greatly by the body of educators. However, there are opinions with regard to the fact that Bloom's taxonomy disregards the affective domain on a large scale, since teaching programs have generally focused on the acquisition of cognitive domain objectives. For this reason, educators allocate too much time to cognitive objectives. While doing this, unfortunately, they easily ignore affective objectives. In traditional teaching practices, for this reason, an evaluation based on cognitive domain outputs can be mentioned. On account of this, revision of the taxonomy is generally related to the cognitive domain. The reason for this is the lack of agreement among educators about the matter of affective domain and the difficulty in the evaluation of outputs of this domain.

Generally educators spend most of their time on teaching students what they have to learn and little of their time on reasons why students have to know about these pieces of information. Bloom put forward the fact that the realization of cognitive objectives actually depends on the affective domain by stating the importance of such affective features as motivation and interest in test achievement and laid stress on the mistakes made in educational reasoning. Other than Bloom, Liff (2003), too, revealed the presence of a strong connection between the cognitive domain and the affective domain in students' academic developments. In addition to Bloom and Liff, in this study, too, because of the presence of a high-level positive relation between cognitive behaviors and affective behaviors, it can be considered that cognitive and affective behaviors should be handled together in learning.

Students tell their teachers about their problems with respect to this matter mostly with such questions and judgments as "Why do we have to learn this?", "Which need of ours will this meet?", "Will this piece of information be covered in the exam?" Moreover, some studies demonstrate that if affective domain outputs-acquisitions are disregarded, learning and remembering decrease (Ringness, 1975). Thus, it can be evaluated that if the affective domain is neglected, cognitive acquisitions cannot reach the desired level (Halawi, McCarty and Pires, 2009).

RECOMMENDATIONS

In the light of these judgments, the present study suggests that cognitive and affective behaviors should be dealt with holistically and the

learning-teaching process should be arranged in a way that will meet students' expectations in order to increase the performance levels of the teachers and the students at the schools where the study was carried out.

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