Teachers' Application Levels of Common Teaching Principles and the Problems They Encounter

By

Etem Yeşilyurt
Mevlana University, Konya, Turkey

Abstract

The general aim of this study is to determine teachers' application levels of common teaching principles and the problems they encounter. This study, which is designed as a qualitative research approach, is carried out by using "case study" design. The study group is composed of 105 teachers, who work in primary schools of the center and villages of Hizan district of Bitlis province. The study group is chosen with "easy to reach case sampling" method. Data is obtained through "semi-structured interview form", which is prepared by the researcher. Data from interview form is first recorded as a document and then by transferring this into NVivo 8 qualitative data analysis program, it is analyzed by content analysis. The result of the study shows that "according to aim (purpose/goal) principle" is used at the highest level by the teachers. It has been determined that common teaching principles such as student-centeredness principle, based on prior knowledge, concrete to abstract, easy to difficult principle and close to far principle, the principle of clarity, the closeness to existing life principle, actuality and sociality principles are also used by the teachers often. On the other hand, the activity andthematicness principles are used at lowest level.

Keywords: *Common Teaching Principles, Principles and Methods of Teaching,Application Level, Teachers.*

1. Introduction

Education and education institutions, primarily schools where education is offered in a planned way have the principal duty in the preparation of students for life, socialization, self-development and realization, getting profession, and passing society's cultural heritage to new generations. The most important partners in education institutions are students and teachers. Therefore, teachers have fundamental responsibility in enabling education and education institutions to reach their aims. Thus, teachers are to take common principles of teaching as basis when they are arranging and execute education process.

Many theories have been developed to explain learning and its results. These theories have also developed learning principles about learning dimension (Özden, 2000). A number of teaching principles which have emerged to make education activities more effective since the 17th century as a result of studies by scholars like (Küçükahmet, 2001).

Teaching principle can be defined as a basic idea which can shed light on the design and execution of teaching process. Teaching principles are sort of criteria for activities in education process and guides for teachers. Common teaching principles are the points of departure for all activities from the design and application of an education program and choosing education equipments and materials. Therefore, knowing and applying education principles are among the duties of all partners in education, primarily

being the teachers (Karatekin and Durmuş, 2008). Accordingly, common teaching principles in education and their general characteristics are given below.

According to aim (goal/purpose) principle: It is the teaching principle which requires teachers to take aim into consideration. The principle of objective-oriented provides basic data about what the desired behaviors expected from students are. The objective-driven principle which is considered in line with general and special objectives of every course and subject and it also provide guidance in the application of other principles.

Student-centeredness principle: It is based on the views of pupil-oriented approach which is one of the modern education movements. According to this principle, student is the center of teaching process. According to this principle, in designing education activities students' developmental characteristics, needs, interest, intelligence level, enthusiasm and their individual differences are taken into consideration (Taşpınar, 2010).

Based on prior knowledge principle: This is a teaching principle which prescribes teachers allow for student's previous learning experiences in the planning and execution of teaching process. This principle prescribes building on student's prior knowledge and experiences to teach new knowledge and experiences. According to this principle, departure point for teaching students new knowledge is to be their prior knowledge and new knowledge they acquire are to be related with prior knowledge (Turan, 2007).

From concrete to abstract principle: Human mind develops from concrete to abstract. Therefore, individuals learn knowledge better when they see and perceive concrete things, which is proven with the fact that 83% of knowledge learnt are through learning. In this context, according to from concrete to abstract principle, teaching process are to be concretized with teaching materials, pictures, tables, graphics etc. (Sünbül, 2010).

Easy to difficult principle (simple to complex principle): This principle emphasizes that first students are to be thought information that they can easily handle, grasp and learn. It is based on the hypothesis that in this way, students' self-confidence develops, their motivation increases and they can easily learn the subjects they have difficulty in understanding.

From near-to-far principle: Students live in natural and social environment. Therefore, first of all they primarily want to learn social and physical environment. Information to be thought to students cannot be independent of their natural and social environment. Learning process activities are to be handled in an order starting for example from family, school, district, city etc. Teaching starting from the closest place in geographical and daily life will increase its effectiveness (Demirel, 2007; Sözer, 2005).

Clarity principle: This principle is based on the assumption that courses are thought in a clear and understandable way and according to their level. Clarity of a learning item depends on its being perceivable with all dimensions and being understandable. Learning process is to include activities which will address to as various senses as possible and subject are thought with supplementary equipments and materials (Taşpınar, 2010).

Closeness to existing life principle: This principle is based the view that school and learning environment are not disconnected from life and an artificial environment. School is to prepare students to life and be the life itself. To this end, course subjects and activities are to be determined considering real life or in teaching process subjects are to be connected with real life. To achieve this, schools are to educate students to have knowledge and skills necessary for life (Ergün and Özdaş, 1997).

Actuality principle: This principle is closely related to closeness to life, student-centeredness, from near-to-far principles. According to this principle, student's age, emotional, physical and mental characteristics

are to be taken into consideration. Besides, realities of daily life are to be given place in teaching process and activities and they are to be related to daily events (Taşpınar, 2010).

Sociality principle: Education also aims to enable individuals to adapt to society and socialize in a robustly. In this process, on the one hand students are expected to get acquainted with and accept cultural heritage, on the other hand they are to realize the requirements of being a social being. Therefore, the principle of sociality requires individual's compliance with each other and social environment and acquiring of society's values.

Principle of wholeness: This principle prescribes considering pupil as a whole entity from cognitive, emotional and psychomotor aspects and educated in a balanced in all dimensions. Considering children's cognitive development only or psychomotor development pave the way for the development of unbalanced personality. Therefore, the principle of wholeness is emphasized bringing up individuals who are developed in cognitive, emotional and psychomotor aspects. This case is also in compliance with general definition of education.

The saving (economy) principle: "Gaining the most output with the least input" is defined as economy. The aim is to obtain the highest efficiency in the shortest period of time and with the least effort. To achieve this every kind of activity is to be planned in a regular way (Demirel, 2007).

The activeness (learning by doing and experiencing) principle: This is a teaching principle which prescribes that students are to actively participate into learning process and interact with learning components. The more learners are in teaching process and the more active s/he is, the more learning is effective and lasting. The popularity progressive education process gained in education realm caused activeness principle to gain prominence. This principle is based on the essence that in learning process learners are to learn by doing and experiencing (Sünbül, 2010).

The thematicness principle: This principle is based on the essence that subjects of different courses are to be related to each other in a meaningful way. Relating subjects and activities of different courses to each other in a meaningful way increases effectiveness of education and provides learners with opportunities to learn more easily (İşler, 2004).

Common teaching principles have a rather significant place in realizing the aims of education program, making learners acquire the content, effective and efficient execution of teaching situations, achieving objectivity in assessment. On the one hand, these principles are integral part of student-centered education; on the other hand they provide guidance to teachers to fulfill their duties and responsibilities. However, the researcher reviewed relevant literature in English and Turkish to find studies about to what extend these theoretical principles are used by teachers in practice and the problems they encounter when they use these principles but could not find any relevant study. This case necessitatesto carry out a study to determine to what extend teachers use common teaching principles and the problems they encounter when using these principles.

Aim of the Study
The general aim of this study is to determine teachers' application levels of common teaching principles and the problems that they encounter.In line with this general aim, answers to the following question were sought:
a. Which teaching principles do teachers use most in teaching process?
b. What problems do teacher come across when using teaching principles?

2. Methodology

In this section of the study, information about the study design, study group, data collection and data analysis are given.

Research Design
This study which is designed as a qualitative research approach is carried out using "case study" design. As the aim of case study is to reveal results about a certain case, the results obtained are not generalized to different cases (Yıldırım and Şimşek, 2006; 77).

Study Group
The study group is composed of 105 teachers who work in primary schools of the center and villages of Hizandistrict of Bitlis province. The study group was chosen with "easy to reach case sampling" method. In this method, the researchers chooses a case which is close and easy-to-reach (Yıldırım and Şimşek, 2006; 113). All of the teachers in the study group have a service length of 1 to 5 years and information about their demographic characteristics are given in Table 1.

Table 1: Demographic Characteristics of Teachers Participating the Study

Gender		f	%
1	Male	62	59.05
2	Female	43	40.95
Branch		**f**	**%**
1	Class Teacher	52	49.53
2	Science and Technology Teacher	15	14.28
3	Primary School Mathematics	7	6.66
4	Social Sciences Teacher	7	6.66
5	Pre-School Teacher	7	6.66
6	Turkish Language Teacher	6	5.72
7	English Language Teacher	6	5.72
8	Physical Education Teacher	5	4.77
Faculties Graduated		**f**	**%**
1	Education Faculty	100	95.23
2	Physical Education High School	5	4.77
Total		**105**	**100.00**

Data Collection Tool
To collect data "semi-structured interview forms", which were developed by the researcher and which is composed of 14 open-ended question and instruction as to how to fill in the form. This form was sent to two experts in the field and two language experts for its suitability to purpose, clarity and understandability and according to feedback from them it was re-arranged to have its final form. Following this method, the researcher tried to achieve content and face validity of the measurement tool. As a matter of fact, Büyüköztürk (2007) emphasizes that content and face validity of measurement tool can be assessed with expert views.

Data Collection and Analysis
The data collection tool was administrated to teachers on November 17th, 2011 in Hizan Culture Center during in-service training program provided by AB Data Counseling and supported by district directorate of national education. Before applying data collection tool, the researcher made a 10 minute speech to teachers to inform them about the common principles of teaching process. Later on, the researchers informed the study group about the significance and scope of the study and how to fill in interview form. Those who volunteered to take part in the study were applied the data collection tool and the application

lasted 15 to 25 minutes.

Data from interview form were first recorded as word document and then transferred to NVivo 8 qualitative data analysis program and submitted to content analysis to analyze. The essence of content analysis is to group similar concepts and themes together and interpret and present them in a way understandable to reader (Yıldırım and Şimşek, 2006; 227). In the process of analysis, the views teachers expressed with regard to the extend teachers use common teaching principles and the problems they encounter when using these principles were analyzed and the resulting themes were modeled in a way to show the relation between them. The thickness of the arrows which show the relations in the model indicates the number of references to that theme. This numeric value obtained was used to determine the thickness of arrows in 1n to 5n range. The thicker the arrows indicating themes increases, the number of reference increases as well. Code system was used to analyze teachers' views about the level teachers use common teaching principles and the problems they encounter when using these principles. For example, in the code (1, 4, 69) gender indicates gender, the second number indicates branch, the third stands for participant code. The sample code stands for a female social sciences teacher in the 69th position.

In a qualitative study by Yıldırım and Şimşek (2006; 265), they emphasized that validity of the study is achieved with expert view, participant confirmation and detailed description and reliability of the study is achieved with consistency and confirmation examination. The results obtained were confirmed by five participants to achieve validity of the study. To achieve reliability, an outsider expert was asked to analyze raw data and the correlation between his results, interpretations and suggestions and those of this study was examined. On the other hand, detailed quotations were made from the results of the study to reflect the essence of the views in relevant theme to increase the quality of the study

3. Results

As a result of the analysis of data, it was determined that teachers use all of the 14 common principles in teaching process and encounter 51 different problems when using them. Figure 1 depicts a model which represents the level teachers used common teaching principles and the problems they encounter.

1. According to aim (goal/purpose) principle: It was determined that out of 105 teachers in the study group 98 used according to purpose principle. This result also reveals that according to purpose principle is the teaching principle that teachers use most. On the other hand, 31 teachers stated that they encountered problems when using this problem. These problems and examples of them are mentioned below.

Inappropriateness to student level: Teachers stated that the objectives of the courses were not appropriate to students' level and that they had problems in this respect. The following statements represent the problem teachers experience *"The objectives determined are not suitable to students age and development level (1, 5, 23)"* , *"Sometimes objectives can exceed students levels. I have difficulty to reach course objectives because of this (1, 4, 84)"* and *"The objectives are not realistic, students' levels do not allow for reaching these objectives (2, 7, 42)"*.
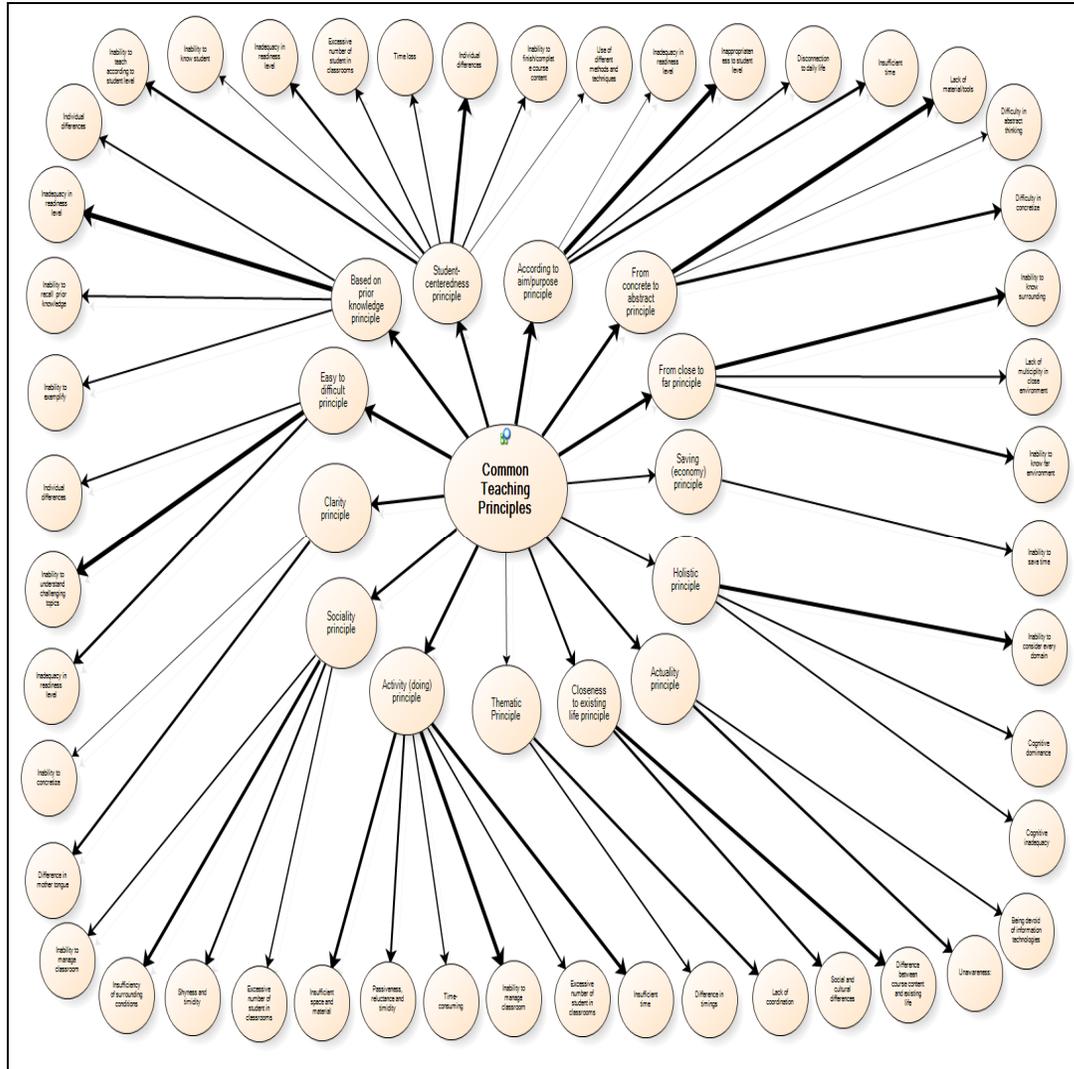
Figure 1: Schematic representation of the teachers' application levels of common teaching principles and the problems they encounter when using them.

Insufficiency of time: Another problem teachers stated is that they encountered when using the principle of according to purpose principle is insufficiency of time in reaching objectives. This problem is stated in teachers views *"The number of course hours of difficult courses (e.g. math's) is adequate, which prevents student from attaining target behaviors (1, 1, 56)"* and *"Sometimes time is insufficient to reach objectives (2, 6, 27)"*.

Disconnection from daily life: Teachers who think that objectives are different from students real life and do not reflect real life stated that they had problems about this. This problem is reflected in their sayings: *"Objectives are not suitable to the conditions of village's conditions (2, 1, 83)"* and *"Objectives are not suitable to children's lives (2, 1, 32)"*.

Inadequacy in readiness level: It was determined that, the last difficulty teachers encountered in the application of according to purpose principle is students' inadequate readiness level. The relevant

problem is reflected in the following statement: *"The level of students in the class I teach is low so I have to realize objectives of the lower grade. (1, 7, 91)"*.

2. Student-centeredness principle: As a result of qualitative analysis, it was determined that the most reference was made to "student centeredness" principle and that 95 of the teachers in the study group used this principle. On the other hand, 58 teachers stated that they had problems when using this principle. Below the problems teachers encounter when using student-centeredness principle are given from the highest level to the lowest level.

Individual differences: It was determined that teachers experienced difficulties when applying student-centeredness principle mostly due to individual differences. The following statements can be given as examples:*"It is quite time-consuming to prepare presentations and tests for each student because differences between students' levels in the class lead to difficulty (1, 7, 66)"* and *"As each student is different from other, I cannot take individual differences into consideration, and when I try to take it into consideration, I think I cannot progress in the subject and content (2, 6, 8)"*.

Inadequacy in readiness level: The teachers who participated in the study stated that the second most common problem when applying student-centeredness principle stem from inadequacy of students readiness level. *'Students' cognitive readiness levels being low tires me (1, 4, 14)"* and *"Sometimes the level of learner is lower than the grade s/he attends. In this case, no matter what I do I cannot teach class accordingly. (1, 2, 2)"*.

Inability to teach according to student level: The third problem in the application of student-centeredness problem is inability of teachers to teach according to student level. *"Even if I try to use student-centeredness principle, I cannot sympathize with them. I cannot go down to their level and I cannot teach according to their level. (1, 3, 7)"* and *"I have difficulty in teaching subjects in a way that they can understand and in getting down to their level (2, 2, 12)"*.

Time loss: The forth problem teachers experience when applying student-centeredness principle is time loss. This problem can be represented by the following statement:*"As the level of each student is different, I lose time when I show interest one by one. (1, 1, 10)"*.

Excessive number of student in classrooms: Teachers stated that they had problems in applying student-centeredness problem in crowded classes. The following statement can be given as an example: *"It is difficult for me to reach to and show interest to every student in the classroom because classes are very crowded and the curriculum is very intense (2, 7, 42)"*

Inability to cover course content thoroughly. When teachers are applying the principle of student-centeredness principle, the sixth problem they complain about is not being able to cover the content of the course. The following statement represents this problem: *"Student centered teaching take a lot of time, which causes me not to be able finish subjects (2, 1, 28)"*.

Use of different methods and techniques: Teachers stated that they had problem in using different methods and techniques in teaching process. The following can be given as an example *"It takes quite a lot of time to determine and use teaching method according to each student. Therefore, I have to spare time for my students out. (1, 3, 69)"*.

Inability to know student: In using student-centeredness principle, the last problem teachers stated that they encountered the problem of inability to know student. This problem can be represented with the

following statement *"I have difficulty in determining student's levels and knowing their personal characteristics (1, 3, 5)"*.

3. Based on prior knowledge principle: Another principle teachers use in teaching process is based on prior knowledge principle. It was revealed that this principle was used by 95 teachers and 33 of them had problems in applying this principle. The problems teachers experienced are given in order of frequency.

Inadequacy in readiness level: It was found that when applying based on prior knowledge principle teachers had problems related to inadequate readiness. The following can be given as an example for this theme*"As students' levels of readiness were low, I have difficulty in teaching new and unknown subjects (1, 7, 66)"*.

Individual differences: Another problem teachers have in using this principle in teaching process is related to individual differences. The following statement represents the problem *" There is a huge gap between students' cognitive levels and prior knowledge, sometimes one doesn't know anything about a topic while another knows it and this case is very tiring for me (2, 2, 98)"*.

Inability to recall prior knowledge: Another problem in applying based on prior knowledge principle is that students forget what they have learnt before. *"After summer vacation, students generally forget the knowledge they learnt in the previous year as they do not revise them. I have to teach the topics which are to be known normally. In this case, I have the feeling of not being able to teach every topic (in the curriculum) and get sad (2, 6, 8)"* .This statement represents the problems in this issue.

Inability to exemplify: The last problem teacher experience with regard to the application of based on prior knowledge principle is that they cannot find suitable examples in the subject taught. The following view expressed by a teacher *"I was born, grown up and went to school in a city. I am teaching in a village and I hardly know anything about life in village. Therefore, I sometimes have difficulty in giving examples that they can understand (2, 6, 55)"* concretize the problem.

4. From concrete to abstract principle: It was determined that 94 of 105 teachers in the study group used from concrete to abstract and 37 teachers had various problems when using this principle. Below the problems teachers had when applying the principle of from concrete to abstract principle are given in order of frequency.

Lack of materials: When teachers are applying from concrete to abstract principle, the most common problem they had was lack of materials. The following statement can be given as an example to this problem *"I cannot find materials in the school to support and concretize the topics I teach. The school does not provide necessary support in this issue (1, 1, 4)"*.

Difficulty in concretizing: The second most common problem teachers have when using from concrete to abstract principle is difficulty in concretizing. The following statements can exemplify this problem: *"I cannot find concrete objects and examples about every topic and I cannon concretize the topics (1, 1, 77)"* and *"I have difficulty in finding concrete objects when teaching some topics (1, 5, 9)"*.

Difficulty in abstract thinking: It was determined that he last problem experienced when using from concrete to abstract principle, is difficulty in abstract thinking. The following can set an example for this case*"Students being slow in passing from concrete thinking to abstract thinking makes it difficult for them to understand topics (2, 1, 28)"*.

5. Easy to difficult principle: It was determined that 94 teachers in the study group use this principle and among them 13 teachers had various problems in applying this principle. The problems teachers have when applying this principle are given in order of frequency.

Inability to understand challenging topics: It was determined that the most common problem teachers experience when using simple to complex principle was that students could not understand difficult topics. The following can be given as an example *"Students understand easy topics and operations easily but I have difficulty teaching and they have difficulty understanding difficult topics (1, 5, 9)".*

Inadequacy in readiness level: It was determined that inadequacy of students in terms of readiness level made it difficult to use simple to complex principle. The following statement expresses this view *"As students levels are generally low, in general I cannot go beyond easy topics (1, 1, 70)".*

Individual differences: It was seen that the last problem that makes the application of simple to complex principle difficult is individual differences. The relevant problem is *"As there are differences between students levels, difficult topics are not understood by some students (1, 6, 35)".*

6. From close-to-far principle: It was determined that 91 of teachers who participated the study applied from near-to-far principle and 18 had various problems when applying this principle. The problems with regard to this principle and the examples related to this problem are given below.

Inability to know surrounding: Teachers stated that they had problems in applying this principle as teachers do not know the close environment they work. The problem about not knowing close environment *"I do not know socio-economic, geographical etc. characteristics of the area I work; therefore, I have difficulty in applying this principle (1, 1, 33)".*

Inability to know far environment: Teachers stated that they had problems in applying from near-to-far principle as students do not know far environment. Following statements represent the problems experienced with regard to this situation:*"As I work in a village, generally it is not possible to go from near-to-far in the students' world. Because they live in limited vicinity, they do not have chance to know far environment and cannot empathize with (1, 2, 16)".*

Lack of multiciplity in close environment: The last problem teachers' encounter when applying from near-to-far principle is the lack of multiciplity in close environment. The following statement is a sort of summary of the problem *"As examples for most of the topics covered in course books are different from what students see in their vicinity and as I cannot find example in close vicinity, I generally base my teaching on examples from far environment (1, 1, 39)".*

7. Clarity principle: It was determined that 90 teachers in the study group used clarity principle, which is one of the teaching principles, and 20 teachers had problems when applying this principle. The problems experienced in using this principle and their examples are as follow.

Difference in mother tongue: The most common problem teachers encounter when using clarity principle is that teacher and students have different mother tongues. This problem is reflected in the following statement *"The mother tongues of students in the area I work is not Turkish, I cannot apply this principle as their Turkish is weak. Students cannot understand the topic completely. (1, 1, 10)"*

Inability toconcretize: The second problem teachers experience when applying the clarity principle is that they cannot concretize abstract topics. The problem in concretizing is expressed as follows*"I have difficulty in visualizing and concretizing abstract topics. (1, 1, 95)"*

8. Closeness to existing life principle: It was revealed that 89 teachers in the study group use this principle and 13 teachers had various problems using this principle. The problems related with the application of this principle and examples expressing these problems are mentioned below.

Difference between course content and existing life: Teachers stated that they had problems in applying this principle because of differences between course content and real life. This problem is represented by the following statement: *"Sometimes I have difficulty in finding examples from real life about the topic I teach, topics are little related to pupils' real life (1, 1, 4)".*

Social and cultural differences: The second problem in applying the closeness to existing life principle stem from course contents and social and cultural differences of teachers. This problem is represented by the following statement *"As I am culturally different from teachers, I cannot find examples suitable to their culture, I have difficulty as the examples I give from life are rarely found in students' social environment (1, 1, 6)".*

9. The actuality principle: It was revealed that 84 of teachers use the principle of actuality and 21 of them had various problems using this principle. The problems encountered with regard to this principle and examples representing them are given below.

Unawareness: The biggest problems teachers have when using the principle of actuality is that students are not aware of actual incidence and information. This problem is represented with the following view expressed by a teacher *"Students are not aware of actual incidences and they are very inadequate in this issue (1, 1, 62)".*

Being devoid of information technologies: Another problem teachers have in applying the principle of actuality is that students' lack of knowledge about information technology. Teachers who state that socio-economic level of child's family and environment is also influential say the following about the problem *"As there aren't newspapers, the internet and even TV where I work, students cannot keep up with actual events, it causes topics not to correspond with actual life (1, 4, 45)".*

10. The sociality principle: It was determined that 83 teachers in the study group used the sociality principle and 23 of them had various problems when using this principle. The problems and examples related to them are given below.

Insufficiency of surrounding conditions: Teachers stated that inadequacies of the conditions in the environment prevent teachers' socialization. With regard to this issue *"Inadequacy of social environment and conditions makes it difficult to apply this principle, there are places neither in the school nor outside the school where students engage in social activities (2, 2, 61)".*

Shyness and timidity: It was determined that students' shyness made it difficult to use this principle. This problem can be exemplified *" Students are shy to study together and avoid cooperative learning (1,2, 34)".*

Excessive number of students in classrooms: Teachers who state that crowded classrooms make it difficult to apply sociality principle say the following about this problem: *"Crowded classroom prevents using drama, group study and cooperative learning methods which are useful for socialization (1,2,102)".*

Inability to manage classroom: It was found out that the last problem encountered when using the sociality principle is about classroom management. This problem *"When I use this principle, there is too much noise or disruption in the classroom, discipline is lost and I have difficulty about classroom management (1, 1, 52)".*

11. The holistic principle: It was determined that 79 teachers out of 105 teachers used this principle and 7 teachers encountered some problems when using this principle. These problems and examples related with this problem are given below.

Inability to consider every domain: Teachers stated that they could not take every area into consideration when using the holistic principle. The following view expressed by a teacher concretizes the problem *"It is difficult to address to all areas in a limited period of time, while I try to enable students acquire competencies in one area, I miss another (1,1, 39)"*.

Cognitive inadequacy: Another problem encountered in using the holistic principle is the inadequacy of students' cognitive level and thus teachers dwell on this area. With regard to this issue *"Deficiency in students'-knowledge in cognitive area(2, 1, 22)"*.

Cognitive dominance: The last problem the teachers encounter in using this principle is that they have to emphasize cognitive area. This problem is represented with the following view *"I have to spare too much time to cover course topics, which can prevent children's development in emotional area.(1, 2, 19)"*.

12. The saving (economy) principle: It was determined that 79 of teachers who participated the study used the saving principle and 14 teachers stated that they could not save this principle and had problems in this issue.

Inability to save time: It was determined that teacher could not save time when using the saving principle. This problem is exemplified with the following view *"I have difficulty to manage time and cannot save time. This causes topics to pass from one topic to another very fast (2, 7, 21)"*.

13. Activity (doing) principle: It was determined that 78 teachers in the study group use the activity principle and 41 teachers had various problemsespeciallyin managing classroom. The problems encountered in using this principle and examples about these problems are given below.

Inability to manage classroom: It was determined that the most common problem teachers encountered when using activity principle is related with classroom management. This problem *"When using activity principle,students abusethis, I have problems in excessive noise and classroom management (1, 1, 56)"*.

Insufficient space and material: Another problem in the application of the activity principle is inadequacy of space and materials. This problem is exemplified with the following statement *"The inadequacy of space and material to apply this principle (1, 1, 33)"*.

Insufficient time: It was determined inadequacy of time led to problem in the application of this principle. This problem is exemplified with the following statement *"Studying the topics in time and providing children opportunity to be active lead to time loss (1, 1, 20)"*.

Passiveness, reluctance and timidity: Another problem teacher encounter in applying the activeness principle is student's being passive, reluctant and timid. The following expressed by a teacher with regard to this issue represents the problem: *"Students being timid and disinterested towards courses make it difficult to apply the activeness principle (1, 5, 13)"*.

Excessive number of student in classrooms: It was determined that when applying the activeness principle teachers encountered problems due to crowded classrooms. This problems is exemplified with the following view expressed by a teacher *"Because of crowded classrooms, it is not possible that every student take part in the class (1, 2, 3)"*.

Time-consuming: The last problem the teachers encounter in the application of activeness principle is the long period of time its application requires. This problem is represented with the following view*"I see

217

that it takes a lot of time when I apply this principle, in this case I cannot teach topics in time and cover the curriculum(2, 4, 36)".

14. The thematicness principle: It was revealed that only 63 out of 105 teachers who participated in the study used the thematic principle. This case also indicates that the thematic principle is the principle teachers use the least. On the other hand, 7 teachers stated that they had problems when applying this principle. These problems and examples of these problems are given below.

Lack of coordination: It was determined that the biggest problem teachers have in applying thematic principle is the lack of coordination between teachers. With regard to this principle the following statement can be given as an example: *"As there is a lack of coordination between teachers, to be frank we do not know which teacher is teaching which topics (1, 4, 14)"*.

Difference in timing: Another problem teachers have when using the thematic principle is that similar contents of different courses are taught at different times. This problem is exemplified in the following statement by a teacher: *"Teaching parallel topics of the different courses at different times prevents integration of course contents(1, 4, 46)"*.

4. Discussion and Conclusion

The following results have been obtained based on the findings of this study conducted in order to determine the extend teachers use common teaching principles and the problems encountered while using these principles:

It has been revealed that "according to aim (purpose/goal)principle is the principle which is used at the highest level. It has been determined that common teaching principles such as student-centeredness principle, based on prior knowledge, concrete to abstract, easy to difficult principle and close to far principle are frequently used by the teachers. On the other hand, it has been determined that the principle of clarity, the closeness to existing life principle, actuality, sociality and activity principles are also used by the teachers often. In addition to these, it has been revealed that holistic and the saving principles are used less than the other teaching principles and the thematicness principle is the principle which is used the least. As revealed by the study conducted by Aktay (2005), the fact that the educational principles have been realized mostly in primary schools suggests that the results of two studies are in conformity with each other.

It has been determined that the most important problem that the teachers have while using the according to purpose principle is that the objectives of the educational program were not suitable for the students' development level and cognitive readiness levels. On the other hand, other problems encountered while applying the according to purpose principle is the insufficiency of time for reaching all the objectives and the fact that some objectives are irrelevant to the lives of the students. This result is compatible with the results of the study conducted by Dursun (2006). As a result of the relevant study it has been determined that, depending on the opinions of the teacher candidates and teachers, the time allotted is not sufficient to complete the content of the program and not all the objectives are reached in multi-grade classes.
It has been determined that the most important problem encountered while using the student-centeredness principle has been that the teacher cannot teach the lectures according to the level of each student since there are individual difference among the students. Other problem encountered while using the student-oriented principle are that the students are insufficient especially in cognitive terms, the teachers cannot teach the lectures according to the levels of students, time losses occur when the teachers have to deal with each student individually and teachers cannot take into consideration all the students since there is an excessive number of students in a classroom. Also, it has been determined that the teachers could not finish teaching the subjects while applying this principle, the use of different methods and techniques tire the teachers out and the teachers are unable to know the students in all aspects. As a result of a study

conducted by Michael (2007), it has been revealed that the most important obstacles encountered by the active learning based on students is the difference in individual and characteristic qualities of the students.

The problem of teachers' being have to repeat the subjects they taught before and being unable to teach the subsequent subjects in time since the students are insufficient is the most important problem that teacher encounter while using from known to unknown principle. Other problems occurred while using this principle are that an excessive amount of time is allocated for the students since they are weak in cognitive terms, the students forget about what they learned and the teachers are unable to find fitting examples for some subjects. Some studies on the subject (Chan and Cole, 1987; Chan, 1998; Sünbül, 2002) have determined that insufficiencies of the students in introductory behaviors in cognitive areas affect the students adversely in upper grades and levels. This situation shows us that the results of the relevant studies support each other.

The most important problem that the teachers encounter while using the principle of concrete to abstract is that they cannot teach the subjects by concretizing the subjects because the lack of materials in the classroom or school. In addition to this, the facts that teachers cannot concretize some subjects and the students have a problem in terms of abstract thinking are other problems making it difficult to use this principle. As a result of the studies conducted by Yapıcı and Yapıcı (2003) and Yerlikaya (2000), it was determined that the most important problems the teachers encountered are insufficiency of tools and materials in the classrooms and the schools and overcrowded.

The most important problem encountered while applying the easy to difficult principle is that the students cannot understand the difficult (complex) subjects easily and in a short time. The fact that some of the students comprehend the complex subjects later than the other since they have an insufficient level of readiness and have some individual differences are other problems encountered while applying this principle.

It has been determined that the most frequently encountered problem while using close to far is that the teachers do not have a knowledge of the environment they are living in. On the other hand, the fact that the students do not have knowledge of the far environment and the immediate surrounding does not support the subjects taught by teachers are other problems making it difficult to apply this principle. Some studies conducted on the subject (Álvarez et al., 2002; Lord, 1999; Marinopoulos and Stavridou, 2002) have revealed that the teaching by taking the immediate surrounding into consideration has affected the success level of the student.

The most important problem making it difficult to apply the clarity principle is that the teacher's mother tongue is different that the students' and the students cannot understand the teacher completely because of that. Also, being unable to concretize is another problem that the teacher encounter.

It has been determined that the most important problem teachers encounter while applying the principle of closeness to existing life is the difference between the real life and the content of the lectures and the teachers are unable to match the events of real life and the content of the lectures. Also, the fact that the students and the teachers have a difference in culture is another problem that makes it difficult to use this principle. As a result of the study conducted by Yeşilyurt and Karakuş (2011), it has been revealed that the teachers use the content of the lectures they have been given during their undergraduate education very rarely or almost never while working as teachers. This situation shows us that the results of both studies are compatible with each other.

It has been determined that the most important problem encountered by the teachers while using the holistic principle is that the students are not aware of the actual events or they do not follow the actual events. On the other hand, the fact that some of the students cannot follow the actual events, since their families do not have technological means such as TV, newspaper, computers etc., is another problem, which makes it difficult to apply this principle. At this point, Ocak and Yurtseven (2009) suggest that the largest responsibility belongs to the teacher while applying actuality principle and underline that it is necessary for teachers to make the students face with real life problems and events.

The most frequently encountered problem while the teachers are applying sociality principle is the physical insufficiency of libraries, gyms etc. in the relevant environment.   The facts that the students act shy and tentative while learning by cooperation method, the classroom is overcrowded with students and difficulties occur in managing the classroom are among other problem encountered while applying this principle. Studies conducted on cooperative learning, which has an important role in increasing the academic level of the students, have revealed that cooperative learning also helps the students in socializing (Hichang, Geri, Barry and Anthony, 2007; Johnson and Johnson, 1974; Lukosch, 2007; Perez, Ruiz &Gayo, 2006; Vasiliou and Economides, 2007; Yeşilyurt, 2009; Zhi and Liu, 2007). On the other hand, as a result of a study conducted by Aktay (2005) regarding the issue, it has been determined that the teachers think the most important reasons why the educational principles cannot be realized enough are that the classrooms are overcrowded, the schools do not have libraries, laboratories, gyms, meeting and performance halls, which shows us that the results obtained from both studies support each other.

The most important problem making it difficult to apply the holistic principle is that the teachers cannot take into consideration all cognitive areas, emotional areas and psychomotor areas during teaching process. Also, the insufficiencies of the students in cognitive areas and the fact that the lectures are taught with a focus on cognitive area are other some problems. Studies on the subject (Krajcik and Blumenfeld, 2006; Su, Osisek and Starnes, 2005; Thompson and Beak, 2007; Semerci, Yazıcıoğlu and Semerci, 1999)revealed that the teachers taught the lectures with a focus on cognitive areas and they are not successful in emotional dimension as they are in measuring the cognitive purposes and behaviors of the students.

It has been determined that the most important problem teachers encounter while applying the activeness principle, which is named as the principle of learning by doing and experiencing, is that the teachers are having difficulties in managing the classroom and schools and classrooms are insufficient in terms of equipments. The facts that applying this principle takes time and so the teachers cannot finish teaching the subjects are other problems. Also, others problems regarding the application of learning by living and experiencing are that some of the students are unwilling and passive and the teachers are unable to deal with all students since the classrooms are overcrowded. It has been determined as a result of many studies (Allen, 2003; Klein, 2003; Martyn, 2007; Wilke, 2003) that active participation in the lectures has a positive effect on the success level of the students. One of the competencies of teachers on which the importance is given the most while raising teachers is that the teachers will be able to use the educational equipments and materials effectively in the classroom (Gagné, Briggs and Wager, 1992; Gagné, 1987). The studies on the subject have showed us that more equipments and more time is necessary in the teaching environment during the teaching process which is based on the active learning principle, there is an insufficient number of students in the classroom and not all the active learning activities are suitable for all the students since they have individual differences (Boas, 1989; Harton et. al., 2002; Salemi, 2002).

The most important problem teachers encounter while applying thematicness principle is the lack of communication and coordination among the teachers. As a result of this, teachers' not knowing which teacher taught which subject causes problem. Also, the fact that complementary subjects of different lectures being taught at different time is another problem that makes it difficult to apply this principle. As a result of a study conducted by Dağdeviren (2009) it has been revealed that the levels of sharing of

knowledge, communication, sense of responsibility and level of support for each other are insufficient. This situation reveals that the problems encountered in applying the thematicness principle is supported by results of other studies.

5. Suggestions

The following suggestions have been developed in order to solve the problems encountered while using the principles of teaching process and to increase the extend teachers use these principles by teachers based on the results obtained from the studies.

- ✓ The objective of a teaching program should be suitable for the cognitive level, the readiness level of the students and relevant to the real life.
- ✓ The teachers should know all the students better in all aspects and the numbers of students in a classroom should be limited to a few.
- ✓ The teachers need to accept the individual difference of the students and they should use different teaching methods.
- ✓ The teachers need to take necessary precautions for a student to be at the readiness level of the classroom in which s/he is having education.
- ✓ Physical environment of the classroom and the school and the educational equipments should be sufficient.
- ✓ The teachers should have a good knowledge of the social, cultural, economical and physical structure of the area they are working in.
- ✓ The teachers need to teach difficult and complex subjects by concretizing and in a way that is comprehensible by the students.
- ✓ The teachers should improve themselves well especially during the pre-service (undergraduate education) period.
- ✓ The teachers should raise the students in emotional areas and psychomotor areas as well as cognitive areas.

References

Aktay, S. (2005).*The Realızatıon Of The Educatıon And Teachıng Prıncıples In The Prımary Educatıon,* Master's Thesis, Anadolu University, Graduate School of Educational Sciences, Eskişehir.

Allen, D. A. (2003) .*The Development And Assessment Of An Active Learning Environment, cAcL2 Concept Advancement Through ChemistryLaboratory-Lecture,*Phd Thesis, North Carolina University.

Álvarez, P., Fuente, E. I., Perales, F. J. and Garcia, J. (2002). Analysis of A Quasi-Experimental Design Based on Environmental Problem Solving For The Initial Training of Future Teachers of Environmental Education, *Journal of Environmental Education,* 33(2), 19-21.

Boas, H. D. (1989). Implementing a school-based staff development project designed to promote active learning and increase student interest in elementary social studies: A case study. *Dissertation Abstract International,* 49(7), 31.

Büyüköztürk, Ş. (2007).*Handbook of Data Analysis for Social Sciences,*Ankara, Pegem A Publishing.

Chan, K. S. (1988). Effect of Cognitive Entry Behavior, Mastery Level, and Information about Criterion on Third Graders' Mastery of Number Concepts, *Journal for Research in Mathematics Education,* 19(5), 439-48.

Chan, K. S. and Cole, P.G. (1987). An Aptitude-Treatment Interaction in a Mastery Learning Model of Instruction, *Journal of Experimental Education,* 55(4), 189-200.

Dağdeviren, İ. (2009).*The Problems Encountered During The Education Process By The Classroom Teachers Working İn The Village (Sample Of Province Sivas),* Master's Thesis, Cumhuriyet University Social Sciences Institute, Sivas.

Demirel, Ö. (2007).*Principles and Methods Of Teaching, Teaching Art,* Ankara, Pegem A Publishing.

Dursun, F. (2006). Problems Encountered in Elementary Multi-Age Classrooms in Turkey, *Gaziosmanpaşa University Journal of Social Science,* 2(2006), 33-57.

Ergün, M. and Özdaş, A. (1997).*Principles And Methods Of Teaching,*İstanbul, Kaya Printing Press.

Gagné, R. M. (1987). *Introduction", Instructional Technology: Foundations,* New Jersey, Lawrence Erlbaum Associates.

Gagné, R. M., Briggs, L. and Wager, W. W. (1992). *Principles of ınstructional design,* Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.

Harton, H, C., Richardson, D. S., Barreras, R. E., Rockloff, M. J. and Latane, B. (2002).Focused Interactive Learning: A Tool for Active Class Discussion,*Teaching of Psychology,* 29(1), 10-15.

Hichang,C., Geri, G., Barry, D. and Anthony, I. (2007). Social Networks, Communication Styles, and Learning Performance in a CSCL Community, *Computers & Education.* 49(2), 309-329.

İşler, A. Ş. (2004). Interdıscıplınary-Thematic Approach ın Art Educatıon, *MilliEğitimDergisi,* http://yayim.meb.gov.tr/dergiler/163/isler.htm (Date of access: 26.12.2011).

Johnson, D. W. and Johnson, R. T. (1974).Intructional Goal Structure: Cooperative, Competitive or Individualistic, *Review of Educational Research,* (44), 213-240.

Karatekin , N. G and Durmuş, A. (2008). Overcoming Chalkboard – Student-Centered Teaching (Editör: HaticeIşılak andAlpaslanDurmuş), *General Principles in Education* (pp.9 -25), İstanbul, EDAM Publishing

Klein, P. (2003). Active Learning Strategies and Assessment in World Geography Class, The Journal of Geography, 102(4), 146-157.

Krajcik, J. S. and Blumenfeld, P. C. (2006).Project-Based Learning. In K.R., Sawyer.(Ed), *The Cambridge handbook of the learning sciences*, http://site.ebrary.com/lib/ege, Cambridge University Press, New York.

Küçükahmet, L. (2001). *Principles and Methods Of Teaching,* Ankara,Nobel Publication Distribution.

Lord, T. R. (1999). A Comparison Between Traditional and Constructivist Teaching in Environmental Science,*Journal of Environmental Education,* 30(3), 22-28.

Lukosch, S. (2007).Faciliating Shared Knowledge Construction in Collaborative Learning, *Informatica,* 31(2007), 167-174.

Marinopoulos, D. and Stavridou, H. (2002). The Influence of A Collaborative Learning Environment on Primary Students' Conceptions About Acid Rain, *Journal of Biological Education,* 37(1), 18-24.

Martyn, M. (2007) . Clickers in the Classroom: An Active Learning Approach, *EducauseQuarterly,* 2(2007), 71-74.

Mıchael, J. (2007). Faculty Perceptions About Barriers To Active Learning, *College Teaching,* 55(2), 42– 47.

Ocak, G. and Yurtseven, R. (2009). Evaluatıon Of Fıfth Grade Socıal Studıes Textbooks Accordıng To Constructıvıst Learnıng Approach, *Balikesir University Journal of Social Sciences Institute,* 12(22), .94-109.

Özden, Y. (2000). *Learning and Teaching,*Ankara, Pegem A Publishing.

Pérez, J. R.P., Ruiz, M. P. P. and Gayo, J. E. L. (2006). Building a collaborative learning environment based in Wiki, *Current Developments in Technology-Assisted Education,* (2006), 1-4. http://www.di.uniovi.es/~juanrp/docencia/innovacion/2006/Building collaborativelearningenvironment_based_Wiki.pdf (Date of Access: 10.11.2011).

Salemi, M. K. (2002). An illustrated case for active learning, *Southern Economic Journal,* 68(3), 721-731.

Semerci, Ç.,Yazıcıoğlu, S. and N. Semerci, N. (1999). Measurement of Affective Dimension *VIII.National Congress of Education Sciences,* 1-3 September 1999, KTÜ Faculty of Education, Trabzon.

Sözer, E. (2005). Planning and Evaluation at Teaching (Editör: Mehmet Gültekin), *Strategy, Methods and Techniques at Teaching,*(pp: 95-122),Eskişehir, Anadolu University Press.

Su, W. M., Osisek, P. J., and Starnes, B. (2004). Applying The Revised Bloom's Taxonomy To A Medical-Surgical Nursing Lesson, *Nurse Educator,* 29(3),116-120.

Sünbül, A. M. (2002).The Effects Of Completıng Cognıtıve Entry Behavıours Educatıon On The 6th Grades Students' Achıevements In Elementary Schools, *XI.Congress of Education Sciences,*23-26 October 2002, Near East University, Lefkoşa.

Sünbül, A. M. (2010). *Principles and Methods of Teaching,*Konya, Academy of Education Publications.

Taşpınar, M. (2010).*From Theory to Practice Teaching Principles and Methods,* Ankara, Data Publications

Thompson, K. J. and Beak, J. (2007). The Leadership Book: Enhancing The Theory-Practice Connection Through Project-Based Learning,*Journal of Management Education,* 31(2), 278-291.

Turan, M. (2007).Teaching Principles and Methods, AsumanSedaSaracaloğlu, HüseyinHüsnüBahar (Ed.), *Education, Training Principles and Teaching Strategies,* (s. 99-135), İstanbul, LisansPublications.

Vasiliou A. and Economides A. A. (2007). Mobile Collaborative Learning Using Multicast MANETs. *International Journal of Mobile Communications,* 5(4), 423-444.

Wılke, R. R. (2003). The Effect of Active Learning On Student Characteristics In Human Physiology Course For Nonmajors,*Advance in Physiology Education,* 27(4), 207-223.

Yapıcı, M. and Yapıcı, Ş. (2003).Problems Faced by Teachers in Primary Education, *Journal of Science, Education and Thought,* 3(3), 9.

Yerlikaya, A. (2000). *The Study of Level of Exhaustion of Primary School Teachers Working at Villages And İn Cities,* Master's Thesis, Atatürk University Social Sciences Institute, Erzurum.

Yeşilyurt, E. (2009). The Views of Students on the Effect of Cooperative Learning On Student Behaviors, *Fırat University Journal of Social Science,* 19(2), 161-178.

Yeşilyurt, E. and Karakuş, M. (2011). The Problems Teachers Encountered During the Candidacy Process, *International Online Journal of Educational Sciences,* 3(1), 261-293.

Yıldırım, A. and Şimsek, H. (2006).*Qualitative Research Methods in Social Sciences,* Ankara, SeçkinPublishing.

Zhi, E. and Liu, F. (2007). Colloquium, Developing A Personal And Group-Based Learning Portfolio System, *British Journal of Educational Technology,* 38(6), 1117-1121.